

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-2				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			Financial Analysis for 108 (b)				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2014 To 04/29/2015					
Comments: This action initiates WA 2-2 entitled " Financial analyses for 108(b) rulemaking". Michael Pease is appointed the WAM and Peggy Vyas is appointed the alt. WAM. The LOE for the WA is 634 hours and the statement of work is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
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Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2015										
This Action:						634				
Total:						634				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Michael Pease						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-308-0008				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Christie Deskiewicz						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-3316				
						FAX Number:				

CONTRACT NAME: ERAS Analytical Support Contract
CONTRACTOR: Industrial Economics, Incorporated

CONTRACT NO. EPW – 12-013

Work Assignment No. WA – 2 - 2

Work Assignment Manager: Michael Pease
Office of Resource Conservation and Recovery
MC 5303P
1200 Pennsylvania Ave, NW
Washington, DC 20460
Phone: (703) 308-0008

TITLE: Financial Analysis Support for 108(b) Rulemaking

BACKGROUND

EPA is currently undertaking a rulemaking under CERCLA 108(b) which would require certain classes of facilities to post financial assurance for their liabilities associated with the production, treatment, storage and disposal of hazardous substances. (See 74 FR 37213 July 28, 2009 and 75 FR 816 January 6, 2010.) This rulemaking involves several financial analyses to be conducted to analyze rule options. Under a previous contract (EP-W-07-011), the contractor provided analyses involving the construction and evaluation of financial tests using credit ratings, financial statements and ratio analyses for hardrock mines and processors. At present, preliminary analyses have been conducted for both the extraction (mining) and processing portions of the potentially regulated universe and a draft background document created.

Under previous work assignments (WA-B2 and 1-2) under this contract the contractor has evaluated potentially regulated companies' bankruptcy potential, prepared reports on historic rates of returns of various asset classes, built a model that simulates trust fund performance under various scenarios and has conducted initial monte carlo simulations evaluating the impact of certain variables on trust performance. The financial test analyses will help the Agency make important policy decisions about whether and in what form self insurance should be allowed in the regulations. The bankruptcy potential evaluation will help inform the decision of which classes of facilities pose the highest risk of bankruptcy. The information on asset returns, the trust performance model and the monte carlo simulation analyses will help EPA evaluate approaches to trust management and the rates of return from trusts which may inform the choice of a discount rate.

PURPOSE AND OBJECTIVES

This work assignment intends to accomplish several objectives in support of the CERCLA 108(b) rule writing initiative. First, it will continue to evaluate possible discount rates and trust management approaches for possible application in funding long term obligations in the proposed regulations (task 2). Second, it will use information collected as part of the financial test analyses to support the identification of companies that may present a higher level of risk of injury as a result of their corporate structure or bankruptcy potential (task 3). Finally, it will continue supporting the evaluation of financial tests as a method of self insurance for the hardrock mining sector and finish the production of a background document that explains the analyses conducted and the results (task 4).

At present the Agency is prioritizing the evaluation of discount rates and the analysis of trust fund performance. A draft analysis of bankruptcy potential and corporate structure to refine the 'to be regulated universe' has been conducted and may need to be refined at a later date. A draft of the financial test analysis has also been conducted and may also need to be refined or revised before the background document describing the analysis and findings can be finalized.

Task 1: Work Plan and Management

Within three days after the Work Assignment is provided, but prior to preparing the Work Plan or initiating any other task, the contractor shall discuss with the EPA WAM via telephone conference call the background and intent of the task and deliverables.

Within 20 days of receipt of this Work Assignment, the contractor shall prepare and submit a work plan, staffing plan, and budget. The work plan shall lay out cost and labor hour estimates by task. In staffing this work the contractor shall include management with experience with financial test analysis, the treatment of environmental obligations in bankruptcy and the operation of financial responsibility programs and knowledge of discount rate theories and applications. The contractor will also conduct general management activities under this task. These activities shall include such efforts as project financial administration, periodic participation in conference calls and/or meeting with the EPA WAM, preparation of monthly progress reports, contract administration and management efforts. The contractor shall also provide updates on the status of each task to the EPA WAM via telephone conversations at least weekly.

In addition to the other requirements for the work plan, approval of the work plan for this assignment will be contingent upon the contractor providing the basis for how Contract Management Costs will be calculated and reflected on each month's invoice. The contractor shall also specify a ceiling for Contract Management Costs for this work assignment.

The Contractor shall describe in the work plan, how the Contractor plans to apply quality assurance (QA), and indicate in the work plan that the Contractor shall include a brief (e.g., one paragraph or less) summary of QA activities in the monthly progress/invoice reports to the WAM for this work assignment. Because the types of "data" involved in this SOW may mostly come from existing secondary sources which have already been subject to QA (e.g., peer-reviewed journals, audited financial statements and other Federal agencies such as the Securities Exchange Commission or the Mine Safety and Health Administration), the QA activities for this

SOW may only require the Contractor to (a) examine data, calculations, and calculation results (e.g., evaluate numerical outliers), and (b) double-check spreadsheet calculation formulae.

Task 2: Analysis of Discount Rates and Trust Management for Funding Long Term Remediation Costs.

As part of the proposed rule the Agency may allow trust funds (either standby in conjunction with a third party instrument or funded) be used to secure funds for long term obligations. The initial funding amount, and the manner in which trusts are managed and invested can affect the amount of funds available for remediation work in the future. Additionally, trust investment strategies and returns may inform the discount rate chosen for long term obligations. For example, the Agency may allow the series of expected future payments required to fund long term water treatment at a site to be discounted at a rate reflective of projected trust fund returns to arrive at a present value amount. The selected discount rate may greatly affect the cost to industry of complying with the regulation and the likelihood that funds are available to meet future environmental costs, and thus public costs.

- A. The contractor shall refine the model of trust fund performance and the initial monte carlo simulation analyses prepared under the previous work assignment (WA 1-2). Areas of possible refinement may be adjustments necessary to allow for the use of the analytical results in the public domain or to allow for trust model to be more easily updated by EPA in the future.
- B. In addition, the contractor shall continue to analyze various discount rates to assess the costs to industry arising from a given rate and the potential costs to the government at a given rate. The analysis should show the risk to the government at each rate and the variation in costs to industry at each rate.
- C. The contractor shall also revise the analyses in Task 2 A and/or B in response to workgroup comments as directed by the WAM.

Task 3: Analysis of Bankruptcy Potential and Corporate Structure:

- A. The contractor, based on professional experiences and expertise, previously (under WA 1-2) prepared a memo on corporate structure and how it relates (or does not relate) to the reliability of financial assurance instruments, in particular the corporate guarantee and financial test. The contractor shall budget for the possibility of revisions upon review by the WAM and EPA workgroup.
- B. Upon direction from the WAM the contractor shall provide an updated report on corporate structure and bankruptcy potential of companies operating in various commodity groups. The data for this task was collected and prepared under the previous contract (EP-W-07-011) and a draft of the report produced under the earlier WA (WA-B2) under this contract. The contractor may need to update the draft report by incorporating new companies into the report. This work will present the information in a way that will facilitate Agency decisions on whether certain commodities or classes of

facilities pose a greater risk to the public as a result of their producers' or owner and operator's bankruptcy potential or corporate structure.

Task 4: Continue Work on Financial Tests for Hardrock Mining

- A. Financial test analyses for hardrock mining and processing facilities. Under a previous contract (EP-W-07-011), EPA acquired financial information on hardrock mining and processing facilities (as well as chemical manufacturing, petroleum refining and coal fired power plant facilities). Under this task the contractor shall refine financial test analyses of the hardrock mining processing and extraction companies as necessary, and integrate the analyses to show aggregate results. Alternatives considered in these analyses shall include the alternatives previously investigated for hardrock mining companies under the previous contract. Task 4A may involve analysis of additional provisions to the financial test proposal (e.g. a coverage multiple requirement analogous to that found at 40 CFR 264.143(f)(1)(i)(B) and (ii)(B)) or provisions in consent decrees.
- B. Additional technical reports, analysis, and briefings on financial tests. During Agency and interagency review of products by the contractor, additional reports and briefings may be necessary. The contractor shall, for budget purposes, plan on one paper of 5 to 10 pages in length and one briefing. The topics will be described by the WAM in technical directives.
- C. Finalize Background Documents for Hardrock Mining Rule Financial Test Proposal. Under a previous contract the contractor prepared a draft background document for the hardrock mining extraction universe. Under Task 4 C of this work assignment the contractor will update the background document to reflect any changes in the analyses that result from tasks 4A and 4B of this work assignment and then finalize the background document. The background document should cover the hardrock mining extraction and processing universe and provide information for the proposal on the information supporting the analyses, the methodologies followed, and the results of the analyses. The results should be shown for processing and extraction separately and integrated. This document should follow the same outline as the draft background document prepared for the hardrock mining extraction universe of facilities. WAM comments on the background document shall be incorporated and revised drafts of the document prepared as necessary.

Deliverable	Due date
Task 1: Work Plan and Management	
Telephone Discussion w/WAM	Within three days of work assignment initiation
Workplan, staffing and budget	Within 20 days of issuance of the work assignment
Task 2: Discount Rate Analyses	

A. Trust fund performance modeling	Revised report three weeks after receipt of TD from WAM
B. Discount rate analyses	Initial analysis due June 06, 2014 Revised report two weeks after receipt of WAM comments
C. Revisions to analyses in response to workgroup comment	TBD based on TD of WAM Revised reports two weeks after receipt of WAM comments.
Task 3: Analyses of Bankruptcy Potential and Corporate Structure	
Memo on corporate structure and its effect on the strength of financial assurance instruments.	Revision to report 2 weeks after WAM comments on original.
Updated Analyses and results	TBD based on TD from WAM Revised report 2 weeks after WAM comments
Task 4 Continue Work on Financial Tests for Hardrock Mining	
A. Financial test analyses for hardrock mining facilities	
Financial test analyses of the hardrock mining extraction and processing facilities	TBD based on TD from WAM Revised report 2 weeks after WAM comments
B. Additional technical reports, analysis, and briefings on financial tests	TBD based on TD from WAM
D. Update, revise and finalize background documents for HRM financial test proposal	TBD based on TD from WAM Revised report three weeks after receipt of WAM comments

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-2				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period 04/30/2014 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			Financial Analysis Support for				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2014 To 04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's work dated May 27th, 2014 with Level of Efforts, (LOE) at 634 and cost plus fee at \$68,752.33 (b)(4) cost (b)(4) fee). The contractor is not authorized to go over the approved LOE and cost plus fee ceiling for this work assignment without prior approval from the contracting officer.										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
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Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2014 To 04/29/2015				634						
This Action:				0						
Total:				634						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Michael Pease						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-308-0008				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8316				
						FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-3				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015 Base Option Period Number 2			Title of Work Assignment/SF Site Name Support for OUST Final Rule				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2014 To 04/29/2015				
Comments: This action initiates WA 2-03 entitled "OUST final rulemaking". Cho-Yi Kwan is appointed as the work assignment manager (WAM) and Elizabeth McDermott is appointed as the alt. WAM. The LOE for this WA is 261 hours and the statement of work is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
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Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2015										
This Action:						261				
Total:						261				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name ChoYi Kwan						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-347-8908				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Christie Deskiewicz						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-3316				
						FAX Number:				

EPA CONTRACT NUMBER EP-W-12-013

Statement of Work

Work Assignment Number: 2-3

Work Assignment Amendment Number: 0

Title: Analytical Support for Office of Underground Storage Tank (OUST) Final Rulemaking

Contracting Officer Representative (COR): Cho Yi Kwan

Address: RPD/OUST
Mail Code 5402P
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

Telephone: (703) 347-8908
(703) 603-9900 (front office)
(703) 308-0509 (FAX)

Alternate Contracting Officer Representative (COR): Elizabeth McDermott

Address: Same as above

Telephone: (703) 603-7175

BACKGROUND

In 1984, Congress responded to the increasing threat to groundwater posed by leaking underground storage tanks (LUSTs) by adding Subtitle I to the Resource Conservation and Recovery Act (RCRA). Subtitle I required EPA to develop a comprehensive regulatory program for underground storage tanks (USTs) storing petroleum or certain hazardous substances. In 1988, EPA issued UST regulations covering three sections: technical requirements, financial responsibility requirements, and state program approval objectives (see 40 CFR Parts 280 and 281).

EPA published the proposed rule "Revisions to Existing Requirements and New Requirements for Secondary Containment and Operating" in the Federal Register in November 18, 2011 (<http://www.gpo.gov/fdsys/pkg/FR-2011-11-18/pdf/2011-29293.pdf>). The public comment period for the proposed rule ended April 16, 2012. EPA is currently planning to finalize its proposed revisions to the existing UST regulations.

PURPOSE AND SCOPE OF THIS WORK ASSIGNMENT:

The purpose of this Work Assignment Amendment is to provide for analytical support related to costs, benefits, economic impacts, and technical analyses necessary to appropriately assess potential regulatory options related to the existing OUST program. The scope of this Work Assignment includes: analytical modeling, options analysis, assessment of analytical limitations, and document preparation.

This Work Assignment shall build upon, but not duplicate work, conducted under Work Assignments B-3 and 1-3.

WORK STATEMENT:

Task 1. Work Plan, Progress Reports and Budget

Within twenty (20) days of receipt of this Work Assignment Amendment, the contractor shall deliver a work plan. This plan shall include a proposed level of effort, budget, schedule of tasks, and schedule of deliverables. A cost proposal shall accompany this work plan. The contractor shall budget for no more than two one-day trips for one staff member to Washington, D.C. to meet with EPA to brief on project planning and progress, as needed. The contractor shall budget for weekly conference calls with the COR and EPA staff.

Deliverable(s) and Schedule:

Work Plan and Budget within allotted time frame identified above.

Task 2. Revisions to the Regulatory Impact Assessment (RIA)

Building upon the regulatory impact assessment (RIA) document prepared and submitted by the contractor in April 2013, the contractor shall revise the RIA to incorporate any additional revisions or edits based on review from OUST and other EPA offices. This task will include making any necessary changes to the underlying costs and benefits analyses.

The RIA document shall include, but is not limited to, the following: table of contents, executive summary, introduction and discussion of regulatory package, need for regulation, assessment of non-regulatory and of regulatory approaches/options, discussion of the analytic approach (methodology), baseline conditions (regulatory, economic, etc.), alternative baselines, compliance and social costs, sensitivity analyses, economic and distributional impacts (employment, prices, profits, etc.), impacts to small entities, unfunded mandates, relevant executive orders (e.g., environmental justice, tribal impacts, children's health, energy impacts), limitations of analyses, and references.

Deliverable(s) and Schedule:

The deliverables for this Task shall be the complete regulatory analysis document, including all necessary supporting tables, figures, appendices, and analyses, and a document summarizing how the contractor responded to all the comments received. The deliverables for this task shall consist of draft and final documents. The documents shall be in memo format and include all necessary supporting charts and graphics to ensure full reader clarity. The contractor shall submit the RIA in Microsoft Word (.docx) format. All supporting analyses used to generate the results in the RIA shall be submitted in electronic format.

The draft deliverable shall be due to the COR no later than sixty (60) calendar days following contractor receipt of the Work Assignment, including all necessary supporting information. The final document shall address all written COR comments on the draft and be due to the COR no later than seven (7) calendar days following contractor receipt of all written COR comments on the draft. Upon request from the COR, the contractor shall provide interim deliverables to demonstrate progress on this task.

Task 3. Response to OMB and Interagency Comments

Under this Task, the contractor shall prepare written responses to comments on the RIA from OUST and/or other federal agency offices (e.g., Office of Management and Budget), and revise the RIA document and supporting analyses accordingly. All comments requiring responses shall be provided to the contractor by the COR. Upon request from the COR, the contractor shall provide interim deliverables to demonstrate progress on this task.

Deliverable(s) and Schedule:

All deliverables under this Task shall be initiated through a Technical Directive (TD). The deliverables for this Task shall be the complete regulatory analysis document, including all necessary supporting tables, figures, appendices, and analyses, and a document summarizing how the contractor responded to all the comments received. The deliverables for this task shall consist of draft and final documents. The documents shall be in memo format and include all necessary supporting charts and graphics to ensure full reader clarity. The contractor shall submit the RIA in Microsoft Word (.docx) format, and the response to comments in Word or Excel format. All supporting analyses used to generate the results in the RIA shall be submitted in electronic format.

The draft deliverable shall be due to the COR no later than thirty (30) calendar days following receipt of the Technical Directive, including all necessary supporting information. The final document shall address all written COR comments on the draft and be due to the COR no later than seven (7) calendar days following contractor receipt of all written COR comments on the draft. Upon request from the COR, the contractor shall provide interim deliverables to demonstrate progress on this task.

SCHEDULE OF DELIVERABLES		
TASK NUMBER and DELIVERABLE	WORK ASSIGNMENT DUE DATES	
	DRAFT	FINAL
Task 1: Work Plan		
Work Plan and Budget	See final	20 calendar days from WA receipt
Monthly Progress Reports	See final	As required
Task 2: Revisions to the Regulatory Impact Assessment (RIA)	No later than sixty days (60) calendar days following contractor receipt of Work Assignment	No later than seven (7) calendar days following contractor receipt of all written COR comments.
Task 3: Response to OMB and Interagency Comments	No later than thirty (30) calendar days following contractor receipt of Technical Directive	No later than seven (7) calendar days following contractor receipt of all written COR comments.

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <h1 style="margin: 0;">EPA</h1> </div> <div style="text-align: center;"> <p>United States Environmental Protection Agency Washington, DC 20460</p> <h2 style="margin: 0;">Work Assignment</h2> </div> </div>		<p>Work Assignment Number 2-3</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: </div> <p style="text-align: right;">000001</p>																																																																					
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Total:		261																																																																					
Work Plan / Cost Estimate Approvals																																																																							
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Contractor WP Dated:</td> <td style="width: 33%;">Cost/Fee:</td> <td style="width: 34%;">LOE:</td> </tr> <tr> <td>Cumulative Approved:</td> <td>Cost/Fee:</td> <td>LOE:</td> </tr> </table>						Contractor WP Dated:	Cost/Fee:	LOE:	Cumulative Approved:	Cost/Fee:	LOE:																																																												
Contractor WP Dated:	Cost/Fee:	LOE:																																																																					
Cumulative Approved:	Cost/Fee:	LOE:																																																																					
<p>Work Assignment Manager Name ChoYi Kwan</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div>_____</div> <div>_____</div> </div> <p style="text-align: center; font-size: x-small;">(Signature) (Date)</p>			<p>Branch/Mail Code:</p>																																																																				
			<p>Phone Number 703-347-8908</p>																																																																				
			<p>FAX Number:</p>																																																																				
<p>Project Officer Name Shannon Sturgeon</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div>_____</div> <div>_____</div> </div> <p style="text-align: center; font-size: x-small;">(Signature) (Date)</p>			<p>Branch/Mail Code:</p>																																																																				
			<p>Phone Number: 703-605-0509</p>																																																																				
			<p>FAX Number: 703-308-7903</p>																																																																				
<p>Other Agency Official Name</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div>_____</div> <div>_____</div> </div> <p style="text-align: center; font-size: x-small;">(Signature) (Date)</p>			<p>Branch/Mail Code:</p>																																																																				
			<p>Phone Number:</p>																																																																				
			<p>FAX Number:</p>																																																																				
<p>Contracting Official Name Eulvid Rocque</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div>_____</div> <div>_____</div> </div> <p style="text-align: center; font-size: x-small;">(Signature) (Date)</p>			<p>Branch/Mail Code:</p>																																																																				
			<p>Phone Number: 202-564-8316</p>																																																																				
			<p>FAX Number:</p>																																																																				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-3				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-W-12-013			Contract Period 04/30/2014 To 04/29/2015 Base Option Period Number 2			Title of Work Assignment/SF Site Name				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2014 To 04/29/2015					
Comments: The purpose of this amendment is to appoint Elizabeth McDermott as the Work Assignment Manager, (WAM).										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 261				
04/30/2014 To 04/29/2015										
This Action:						0				
Total:						261				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Elizabeth McDermott						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-603-7175				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8316				
						FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-4				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015 Base Option Period Number 2			Title of Work Assignment/SF Site Name Pharmaceuticals RIA				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2014 To 04/29/2015				
Comments: This action initiates Work Assignment, WA:2-4 entitled "Pharmaceuticals RIA". Rachel Horton is appointed the WAM and Scott Palmer is appointed the alt. WAM. The LOE for this WA is 242 hours and the statement of work is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2015										
This Action:						242				
Total:						242				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Rachel Horton							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;">(Signature)(Date)</div>							Phone Number 703-305-0894			
							FAX Number:			
Project Officer Name Shannon Sturgeon							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;">(Signature)(Date)</div>							Phone Number: 703-605-0509			
							FAX Number: 703-308-7903			
Other Agency Official Name							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;">(Signature)(Date)</div>							Phone Number:			
							FAX Number:			
Contracting Official Name Eulvid Rocque							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;">(Signature)(Date)</div>							Phone Number: 202-564-8316			
							FAX Number:			

Statement of Work

=====

Work Assignment Number: 2-4

Title: Preparation of Regulatory Impact Analysis for Pharmaceuticals, and Related Work

Contracting Officer's Representative (COR): Rachel Alford

Alternate COR: Scott Palmer

Address: OSWER/ORCR/ERAS
Mail Code: 5305P
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

Telephone: (703) 305-0894
(703) 308-8895 (front office)
(703) 308-7903 (FAX)

BACKGROUND:

In December 2008, EPA proposed to add hazardous pharmaceutical wastes to the current federal Universal Waste (UW) Program. The UW Program is a set of simplified hazardous waste management standards for a small group of hazardous wastes which currently include batteries, pesticides, lamps and mercury-containing equipment. UWs are typically low-risk during accumulation and transport and are generated in a variety of settings other than the industrial setting (e.g., retail stores, office buildings households). EPA believed that adding hazardous waste pharmaceuticals to the UW program would have simplified the management of hazardous waste pharmaceuticals for the health care industry while encouraging proper disposal of hazardous waste pharmaceuticals. However, based on the public comments received on the proposal, particularly comments raising concerns over the diversion of such wastes due to the lack of notification and manifest requirements under the universal waste program, EPA has decided that the Universal Waste Rule is not the appropriate regulatory approach to address the management of hazardous waste pharmaceuticals. Therefore EPA is working on a new Proposed Pharmaceuticals Rule that will be under a different, more comprehensive regulatory approach.

The EPA has collected data on the amount of pharmaceuticals generated at different facilities, as well as completed a draft Regulatory Impact Analysis.

PURPOSE AND SCOPE OF THIS WORK STATEMENT:

The purpose of the Statement of Work is to provide for all analytical assessment needs related to costs, economic impacts, benefits, document preparation, and related technical and supporting analyses necessary to support the Agency's promulgation of the proposed rule: Pharmaceuticals ORCR Rule. The scope of the Statement of Work includes refinement of cost-benefit analysis based on workgroup, OP and OMB review, and assistance to the COR to respond to analytical comments and questions from the Office of Policy (OP) and Office of Management Budget (OMB). The contractor shall make the best use possible of the Regulatory Impact Analysis (RIA) also known as a Economic Analysis (EA)¹ completed at the end of April 2014 prepared for the proposed rule under contract EP-W-12-013 WA 1-04. The contractor shall not duplicate work done under previous Work Assignments.

Task 1: Submit Work Plan & Budget

The contractor shall supply the COR with a proposed work plan, deliverables schedule, and cost estimate for completing the Tasks described in this SOW. For each of the Tasks in this SOW which involves "environmental data" --- as defined according to EPA's mandatory quality management system² --- the Contractor shall describe in the work plan, how the Contractor plans to apply quality assurance (QA), and indicate in the work plan that the Contractor shall include a brief (e.g., one paragraph or less) summary of QA activities in the monthly progress/invoice reports to the WAM for this work assignment. Because the types of "environmental data" involved in this SOW may mostly come from existing secondary sources which have already been subject to QA (e.g., peer-reviewed journals, and other Federal agencies such as the Energy Information Administration, the Census Bureau, and the Bureau of Labor Statistics), the QA activities for this SOW may only require the Contractor to (a) examine data, calculations, and calculation results (e.g., evaluate numerical outliers), and (b) double-check spreadsheet calculation formulae.

Task 1 Deliverable:

Proposed work plan, deliverables schedule, and cost estimate (budget).

Task 2: Respond to OP and OMB Comments and Revise the RIA

The contractor shall respond to workgroup, OP and OMB comments and revise the RIA based on direction from the WAM. The contractor shall if asked assist with briefing presentations and make editorial and numerical changes to the RIA based on OP and OMB comments. The contractor shall assist with the finalization of the April 2014 draft RIA entitled Regulatory Impact Analysis for EPA's proposed Healthcare Facility-specific Regulations for the Management of Hazardous Waste Pharmaceuticals. The contractor shall revise the RIA in response to workgroup, WAM, OP and OMB comments. There may be editorial comments as

¹ The RIA is a required cost and benefit analysis document for EPA's regulations.

²

Additional information about EPA's quality management system is available at <http://www.epa.gov/quality/>

well as a need for revisions to the methodology and/or numbers in the RIA. Occasionally OMB and or/ OP requests additional sensitivity analysis.

These activities may include, but are not necessarily limited to:

- Additional analyses of the methodology and the models employed in the EA;
- Sensitivity analysis of the number of entities, costs, and/or benefits;
- Preparing briefing packages;
- Providing tables, bullet lists, fact sheets, flow charts, or presentation graphics;
- Drafting a short memo in response to OMB comments regarding how their comments will be handled in regard to the final EA; and
- Incorporating editorial comments into the final EA.

Task 2: Deliverables

The deliverable under this Task shall be draft and final versions of the completed RIA. The draft deliverable shall be due within 10 working days from COR receipt of the final deliverable (TD or otherwise) under Task 2. The final deliverable shall be due no later than five working days following contractor receipt of all written COR comments on the draft. Briefing packages shall be prepared within 2 Agency work days and e-mailed to the WAM and alternate-WAM.

Task 3: Finalize Quantified and Monetized Benefits of the Pharmaceuticals Rule RIA

The contractor shall respond to workgroup, OP and OMB comments on the Pharmaceuticals Rule RIA Benefits Memorandum and benefits chapter of the Pharmaceuticals Rule RIA. The contractor shall modify and finalize the quantified and monetized benefits of the Pharmaceuticals Rule RIA according to comments submitted and some additional internet research and potentially expert insight into the potential benefits of the rule. The final results of the Memorandum from April and May 2014 concerning the benefits of the rule will be put as needed into the benefits chapter in the RIA. Types of research needed may include:

- Monetizing wastewater containing HW pharmaceuticals not put down the sewer and which saves POTW's money.
- Types of treatments that remove pharmaceuticals from the drinking water and the fact that some HW pharmaceuticals still end up in the surface and drinking water after POTW treatment.
- Tons of HW pharmaceuticals not being seweraged
- Enhanced public welfare related to recreational improvements associated with avoided HW pharmaceutical sewerage into bodies of water.

- Potentially additional benefits

Task 3: Deliverables

The deliverable under this Task shall be draft and final versions of the completed Pharmaceuticals RIA benefits chapter and if needed a revised Memorandum in order to satisfy comments and additional research. The draft deliverable shall be due within 10 working days from COR receipt of the final deliverable (TD or otherwise) under Task 3. The final deliverable shall be due no later than five working days following contractor receipt of all written COR comments on the draft.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-4				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			Pharms Rule RIA				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW All tasks					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2014 To 04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's work plan/cost Estimate dated 05/12/2014 with, Level of Effort (LOE) at 242 hours which equals to \$23,610.92 (b)(4) cost (b)(4) fee). The contractor is not authorize to go over the approved LOE and cost plus fee ceiling for this working assignment without prior approval from the contracting officer.										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 242						
04/30/2012 To 04/29/2015										
This Action:				0						
Total:				242						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Rachel Horton							Branch/Mail Code:			
							Phone Number 703-305-0894			
_____ (Signature) (Date)							FAX Number:			
Project Officer Name Shannon Sturgeon							Branch/Mail Code:			
							Phone Number: 703-605-0509			
_____ (Signature) (Date)							FAX Number: 703-308-7903			
Other Agency Official Name							Branch/Mail Code:			
							Phone Number:			
_____ (Signature) (Date)							FAX Number:			
Contracting Official Name Eulvid Rocque							Branch/Mail Code:			
							Phone Number: 202-564-8316			
_____ (Signature) (Date)							FAX Number:			

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-5				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015 Base Option Period Number 2			Title of Work Assignment/SF Site Name Finalize the 2013 DSW Final Ru				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/21/2014 To 04/29/2015				
Comments: This action initiates Work Assignment (WA) 2-5 entitled "Finalize Reg. Impact Analysis for DSW final rule". Chris McMinimy is assigned as the Work Assignment Manager, (WAM) and Mark Eads as the alt. WAM. The Level of Effort (LOE) is for 225 hours. The statement of work is attached. The contractor shall submit a work plan/cost estimate in response to this request.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2015										
This Action:						225				
Total:						225				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Mark Eads <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number 703-308-8615 FAX Number:			
Project Officer Name Shannon Sturgeon <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 703-605-0509 FAX Number: 703-308-7903			
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name Eulvid Rocque <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 202-564-8316 FAX Number:			

Statement of Work

12 May 2014

Project Title:	Finalize the Regulatory Impact Analysis (RIA) for ORCR's 2014 Definition of Solid Waste (DSW) Final Rule
Contract No.:	EP-W-12-013
Work Assignment No.:	2-05
Work Assignment Manager (COTR):	Chris McMinimy, Economist EPA Office of Resource Conservation & Recovery (ORCR) 703-308-0105
Alternate Work Assignment Manager:	Mark Eads, Economist EPA Office of Resource Conservation & Recovery (ORCR) 703-308-8615
Period of performance:	CO signature to April 30, 2015

I. Purpose & Scope

The purpose of this Statement of Work (SOW) is twofold:

1. To direct the Contractor to revise ORCR's January 14, 2014 draft "Regulatory Impact Analysis" (RIA) for the ORCR's 2014 "Definition of Solid Waste" (DSW) final rule.
2. To direct the Contractor to conduct any supplemental analyses for the 2014 DSW RIA that ORCR may be required to perform --- pending outcome of OMB's current 90-day review of the RIA --- to support ORCR's completion of the 2014 DSW final rule.

Given that ORCR's draft 2014 DSW final rule package is already undergoing 90-day review at OMB, the Contractor will need to perform this work assignment within the next month or two, given the assumption that OMB will approve the final rule by end of its review period, and given the assumption that ORCR will then send the final rule for Federal Register publication. Under this scenario, the Contractor will need to complete the Tasks of this work assignment by end of OMB's 90-day review period, which is currently scheduled to end on June 15, 2014 (five weeks from the date of this SOW). But to provide some leeway for the possibility that OMB's review might spill-over beyond 90-days, the COTR has set the end of the period of performance for the end of this option period as a safeguard.

II. Background to ORCR's 2014 DSW Final Rule

Based on the outcome of a June 2009 public meeting hosted by ORCR concerning stakeholder issues about ORCR's October 2008 DSW final rule, in July 2011 ORCR proposed revisions to the 2008 DSW final rule, as well as proposed conforming revisions to 32 prior RCRA industrial solid waste recycling exclusions spanning between 1985 and 2002.

The purpose of the 2008 DSW final rule was to encourage safe, environmentally sound recycling and resource conservation of industrial "*hazardous secondary materials*," and to respond to several court decisions concerning the RCRA definition of solid waste.

ORCR designed the 2008 DSW final rule to revise the RCRA regulatory definition of solid waste by adding three additional exclusions from RCRA Subtitle C hazardous waste regulation for industrial hazardous waste recycled/recovered for (a) metals, (b) solvents or (c) other materials (e.g., acid recovery): The three main components of the 2008 DSW final rule were:

- Generator-controlled recycling exclusion
- Tolling agreement recycling exclusion
- Offsite transfer recycling exclusion

Upon exclusion from the RCRA DSW, industrial wastes are no longer considered either RCRA hazardous wastes or solid wastes, but are classified as industrial “*hazardous secondary materials*” under the 2008 DSW final rule.

Pending OMB review approval, ORCR intends that the 2014 DSW final rule will make several changes to the 2008 DSW final rule. Most significantly ORCR's draft 2014 DSW final rule proposes to remove the 2008 “*offsite transfer based exclusion*” and replace it with an alternative regulatory requirement. Although OMB's current 90-day review is not complete, OMB has voiced significant opposition to modifying the 2008 offsite transfer based exclusion. OMB may request that ORCR make significant changes to this aspect of the rule, which would necessitate conforming changes to ORCR's draft RIA for this final rule.

III. Work Tasks

This SOW falls under the scope of Task 2 “*Regulatory Assessment: Costs Benefits, Economic and other Impacts*” within EPA contract EP-W-12-013 with Industrial Economics Inc. This SOW contains the following work tasks associated with the Contractor providing ORCR assistance and support for finalizing the draft RIA for the 2014 DSW final rule:

- Task 1: Submit workplan and budget.
- Task 2: Assist ORCR with revisions to ORCR's January 14, 2014 draft RIA for the 2014 DSW final rule.
- Task 3: Assist ORCR in responding to OMB and inter-agency review comments and to conduct supplemental analyses for the draft RIA, as may be necessary pending the outcome of OMB's current 90-day inter-agency review of the draft RIA, as determined by COTR technical directive(s).
- Task 4: Pending the outcome of Task 3, the Contractor shall make conforming changes to the draft responses to public comments on ORCR's RIA for the 2011 Federal Register proposal of the 2014 DSW final rule.

Task 1: Submit workplan & budget

Under this task, the contractor shall supply ORCR with a proposed workplan, deliverables schedule, and cost estimate for completing the Tasks described in this SOW.

For each of the Tasks in this SOW which involve “environmental data” --- as defined according to EPA’s mandatory quality management system --- the Contractor shall describe in the Workplan how the Contractor plans to apply quality assurance (QA), and indicate in the Workplan that the Contractor shall include a brief (e.g., one paragraph or less) summary of QA activities in the monthly work assignment progress/invoice reports to the COTR. Because the environmental data involved in this SOW may mostly come from existing secondary sources which have already been subject to QA, the QA activities for this SOW may only need to involve the Contractor (a) examining data calculation results (e.g., evaluate numerical outliers), and (b) double-checking spreadsheet calculations (e.g., using “check-sum” for key computation cells).

Task 1 Deliverable:

- Workplan with a list of deliverables and corresponding due dates, and budget.

Task 2: Assist ORCR with revisions to the January 14, 2014 draft RIA

ORCR currently has a draft RIA for the 2014 DSW final rule which the COTR will supply to the Contractor. The current working draft RIA is dated January 14, 2014. This draft RIA contains a number of revisions which ORCR made in-house in 2012 and 2013 to the Contractor's prior draft RIA deliverable for the DSW final rule from 2011 under work assignment B-05. In 2011 ORCR anticipated that the DSW rule would be promulgated in 2012 (as the "2012 DSW final rule"), but because of delay in OMB review of this rule, ORCR's new expected promulgation date is mid-2014 (as the "2014 DSW final rule").

As of the date of this SOW, OMB is currently conducting its 90-day inter-agency review of ORCR's draft 2014 DSW final rule. ORCR may formulate one or more new regulatory requirements in response to OMB and inter-agency review comments, for inclusion in the 2014 DSW final rule. Such new regulatory requirement(s) may differ from the framework of the current draft 2014 DSW final rule, as to require conforming revisions to the January 14, 2014 draft RIA.

According to COTR Technical Directive(s) for this Task, the Contractor shall assist ORCR with revising the existing draft RIA as necessary to bring it into accordance with such new regulatory requirements of the 2014 DSW final rule. The level of effort under this Task will depend on the magnitude of difference between ORCR's draft 2014 DSW final rule regulatory approach, and whatever new requirements in the final rule OMB and ORCR management may formulate.

Attached as an appendix to this work assignment are two ORCR internal documents describing a possible new regulatory requirement ("*verified recycler exclusion*") which the 2014 DSW final rule may use to replace the 2008 DSW rule's offsite transfer recycling exclusion. The contractor shall use these documents in formulating a work plan and budget for this Task.

Chris --- I don't see these two attachments to this SOW so I cannot review and edit them, but maybe these two internal documents were drafted by MRWMD (Tracy Atagi)? If so, then I don't need to see or edit them.

Task 2 Deliverable(s):

- Deliverable(s) shall constitute both: (a) finalized RIA document, and (b) finalized RIA

appendices. The finalized RIA and appendices shall integrate the necessary revisions to bring ORCR's January 14, 2014 draft RIA into accordance with the ultimate finalized regulatory requirements of the 2014 DSW final rule. Because ORCR's draft 2014 DSW final rule is undergoing 90-day OMB review as of the date of this SOW, the Contractor's timeliness in completing this task will be essential. The milestones and due dates for this work are not known at this time, they will be supplied to the contractor by COTR technical directive.

Task 3: Respond to OMB and inter-agency review comments on the draft RIA, and conduct supplemental analyses for the RIA as needed

Assist ORCR in responding to OMB and inter-agency review comments and to conduct supplemental analyses for the draft RIA, as may be necessary pending the outcome of OMB's current 90-day review of the draft RIA, as determined by COTR technical directive(s).

Based on ORCR's previous experience finalizing RCRA rulemaking RIAs, ORCR foresees that additional RIA-related (i.e., economic) analyses may be needed as part of the 2014 DSW final rule completion process, or at the behest of the EPA Office of Policy or OMB as a part of their reviews of ORCR's draft 2014 DSW final rule and draft RIA.

Although specifics are unknown as of the date of this SOW, the Contractor shall conduct supplemental analyses as detailed in one or more COTR technical directives. For purpose of the Contractor to formulate a workplan and budget for this Task, the Contractor shall assume the need to conduct one of each of the following three types of supplemental analyses:

- Sensitivity analyses: Conduct one or more additional sensitivity analyses for certain key numerical factors applied in ORCR's draft RIA. This type of analysis might require between one-hour to one-week level of effort.
- Interim alternative regulatory options/sub-options: Calculate the costs and benefits associated with one or more interim alternative DSW final rule regulatory options and/or sub-options. This type of analysis might require between one-week and one-month level of effort, depending upon the count and breadth of any such alternative options/sub-options. For example, in addition to possibly modifying the draft RIA to replace the cost and benefit estimates associated with the offsite transfer recycling exclusion with the "*verified recycler exclusion*" as indicated in Task 2 above, OMB or ORCR management may formulate other alternative regulatory requirements and request cost and benefit estimates for those separately. Such other alternative requirements may or may not be accepted for inclusion in the 2014 DSW final rule, and thus may not be included in the finalized RIA under Task 2.
- Alternative methods/ assumptions/ data: Integrate alternative methods, assumptions, or data into the draft RIA numerical calculations (e.g., revise the state government adoption assumptions). This type of analysis might require between one-hour to one-week level of effort, depending upon the extent of cascading effect on the chapters and appendices of the draft RIA.

Task 3 Deliverable(s):

- Deliverables depend upon the scope and substance of each supplemental analysis performed under this task. However, the exact count and scope of such analyses are unknown to the COTR as of the date of this SOW. Therefore, the COTR will specify the type of deliverables in each technical directive under this task. For example, some deliverables may require the Contractor to integrate new or revised text and/or data tables within the draft RIA, and other deliverables may require the Contractor to produce self-standing write-ups (i.e., brief written reports which describe the method, data, and results) of one or more supplemental analyses.

Task 4: Revise Draft Responses to Public Comments on the 2011 DSW RIA

Pending the outcome of Task 3, the Contractor shall make conforming changes to the draft responses to public comments on ORCR's RIA for the 2011 Federal Register proposal of the 2014 DSW final rule.

Task 4 Deliverable:

- Revised version of the responses to public comments on the 2011 DSW RIA, as necessary to make conforming changes to the draft response in line with the outcome of Task 3.

IV. Schedule of Deliverables

Schedule of Deliverables		
Task	Deliverables	Due Dates
Task 1	Work plan & budget	<ul style="list-style-type: none"> • Draft: Twenty (20) days upon receipt of this SOW • Final: Five (5) work days following receipt of WAM comments.
Task 2	Assist ORCR with revisions to the January 14, 2014 draft RIA	<ul style="list-style-type: none"> • Draft: Fifteen (15) work days following receipt of WAM Technical Directive. • Final: Ten (10) work days following receipt of WAM comments.
Task 3	Respond to OMB and inter-agency review comments on the draft RIA, and conduct supplemental analyses for the RIA as needed	<ul style="list-style-type: none"> • Draft: Ten (10) work days following receipt of WAM Technical Directive. • Final: Five (5) work days following receipt of WAM comments.
Task 4	Revise Draft Responses to Public Comments on the 2011 DSW RIA	<ul style="list-style-type: none"> • Draft: Ten (10) work days following receipt of WAM Technical Directive. • Final: Five (5) work days following receipt of WAM comments.

Appendix A

Overview of Changes to the RIA

Thought 1: Go back to the original RIA on state adoption assumptions

Because the new “verified recycler exclusion” has many of the same elements as the “transfer-based exclusion” I think it will be harder to defend different state adoption rates for the two exclusions. It will also make the document cleaner to keep the original 41 state adoption rate, with a sensitivity analysis for different rates. And, as explained below, I don’t we won’t need the different adoption rates for the rule to achieve net cost savings.

Thought 2: Drop “Element 2” Alternative Standard from the RIA and revise “Element 1” to reflect the differences between the Transfer-based exclusion and the Verified Recycler Exclusion

Because the verified recycler exclusion has most of the same components as the transfer-based exclusion, it would be easiest to just add/subtract the new costs savings/costs associated with the verified recycler exclusion from the cost savings baseline instead of re-calculating all elements

Thought 3: The Cost Savings/Cost elements for the verified recycler exclusion are pretty straightforward.

The verified recycler exclusion has one cost savings relative to the transfer-based exclusion (no more “reasonable efforts” audits) and one new cost (new verified recycler variance). The rest of the components are either no cost or negligible impacts.

See attached for my quick calculations on this. Even with very high-end assumptions (all 275 non-hazardous recyclers in the EJ analysis get a variance, variance cost is equivalent to a Part B tank storage permit cost), the cost savings from stopping the generator audits is much higher the annualized cost of the variances (assuming I did the calculations correctly – I’m a little rusty, but I included my spreadsheet so you can check)

Appendix B

(Revised) Element 1: Replace the 2008 DSW Offsite Transfer-Based Exclusion with the 2014 Verified Recycler Exclusion

Requirement 1A: Remove the “reasonable efforts” requirement for the generator to audit recyclers that do not have a RCRA permit.

Annual Cost (savings): (\$12,600,000) (\$2008) (source: 2008 RIA, Exhibit 7C, and page 87)

(needs updating per the 2012 DSW RIA discussion in Section 4A)

Requirement 1B: Require recyclers that do not have a permit to obtain a variance from EPA or the state.

Unit cost: \$11,365/variance (\$2007), 50% of cost for renewal (assumes equivalent to RCRA part B permit for a tank system)
(source: 2008 RIA, page 178)

Frequency: 1 time variance, plus renewal every ten years

Number of entities: 275 (based on the total number of non-hazardous industrial waste recycling facilities identified in the DSW EJ analysis)

Annual costs: \$310,000 (0% discount rate); \$390,000 (3% discount rate); \$520,000 (7% discount rate).

Requirement 1C: Recycling must be done in the United States

Negligible cost – assumes domestic recycling options available under the exclusion

Requirement 1D Definition of “Contained”

No cost– same as Requirement 3A

Requirement 1E Notification (Requirement vs. Condition)

No cost– same as Requirement 3B

Requirement 1F Speculative Accumulation Labeling

Negligible cost – same as Requirement 3C

WORK ASSIGNMENT ADDITIONAL REQUIREMENTS OFFICE OF RESOURCE CONSERVATION AND RECOVERY

The following additional terms and conditions are requirements of this task order:

TECHNICAL DIRECTION

In accordance with EPAAR 1552.237-71–*Technical Direction*, the WAM will provide Technical Direction during performance of this Work Assignment. Technical direction includes:

1. Instruction to the contractor that approves approaches, solutions, designs, or refinements; fills in details; completes the general description of work; shifts emphasis among work areas or tasks; and
2. Evaluation and acceptance of reports or other deliverables.

Technical Direction must be within the scope of the contract-level SOW. The WAM does not have the authority to issue Technical Direction which:

1. Requires additional work outside the scope of the contract or Work Assignment;
2. Constitutes a change as defined in the "Changes" clause;
3. Causes an increase or decrease in the estimated cost of the contract or Work Assignment;
4. Alters the period of performance of the contract or Work Assignment; or
5. Changes any of the other express terms or conditions of the contract or Work Assignment.

Technical Direction will be issued in writing by the WAM, or confirmed by the WAM in writing within five (5) calendar days after oral issuance, if oral instruction provided.

QUALITY ASSURANCE

Performance under this Work Assignment requires the contractor to prepare a Quality Assurance Project Plan (QAPP) to be included as part of the Work Assignment. The contractor shall submit a QAPP with its Work Plan in accordance with *EPA Requirements for Quality Assurance Project Plans (QA/R-5)* found here: <http://www.epa.gov/QUALITY/qs-docs/r5-final.pdf>. The contractor's QAPP must be approved by the WAM and Quality Assurance Manager before Work Plan approval. Following approval of the contractor's QAPP, the contractor shall perform all tasks under this Work Assignment in accordance with the quality standards established in the QAPP.

SURVEY MANAGEMENT

Performance under this Work Assignment may require the contractor to create statistical surveys, perform data collection, use questionnaires, or perform statistical analysis of survey data. The contractor shall perform these tasks in accordance with the *EPA Survey Management Handbook* found here: <http://www.epa.gov/oamcinc1/0710295/attach12.pdf>.

COMMUNICATIONS PRODUCTS

Performance under this Work Assignment may require the contractor to develop deliverables that are considered by EPA to be "Communications Products." If relevant, the contractor shall develop

Communications Products in accordance with *EPA's Policy and Implementation Guide for Communications Product Development and Approval* found here: <http://www.epa.gov/productreview/guide/index.html>. Additionally, if Communications Products require the use of EPA graphics, logos, or other identifiable materials, the Communications Products are further subject to the standards in *EPA's Visual and Product Standards Graphics Manual* found here: <http://wedcor.cor.epa.gov/pages/TIM/VisualIdentity-6-19-07.pdf>.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-5				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			Finalize 2013 DSW Final Rule				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 05/21/2014 To 04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's work plan/cost estimate date 06/10/2014 with Level of Effort, (LOE) of 225 hours & \$29,514.60 (b)(4) cost (b)(4) fee. This amendment also appoints Chris McMinimy as the work assignment manager (WAM) & Scott Palmer as the Alt WAM. The contractor is not authorized to go over the approved ceiling for this work assignment.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO (Max 2) 22 Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 225				
04/30/2012 To 04/29/2015										
This Action:						0				
Total:						225				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Chris McMinimy						Branch/Mail Code:				
						Phone Number 703-308-0105				
_____ (Signature) (Date)						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
						Phone Number: 703-605-0509				
_____ (Signature) (Date)						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
						Phone Number:				
_____ (Signature) (Date)						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
						Phone Number: 202-564-8316				
_____ (Signature) (Date)						FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-6				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015 Base Option Period Number 2			Title of Work Assignment/SF Site Name CCR RIA				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2014 To 04/29/2015				
Comments: This action initiates WA 2-6 entitled "Regulatory Impact Analysis (RIA) for ORCR's CCR Final Rule". Mark Eads is appointed the WAM and Rachel Horton is appointed the alt. WAM. The LOE for this WA is 760 hours and the statement of work is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2015										
This Action:						760				
Total:						760				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Mark Eads <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 703-308-8615 FAX Number:				
Project Officer Name Shannon Sturgeon <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 703-605-0509 FAX Number: 703-308-7903				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Eulvid Rocque <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-8316 FAX Number:				

Statement of Work

28 April 2014

Project Title: Regulatory Impact Analysis for ORCR's 2015 Coal Combustion Residuals Final Rule

Contract No.: EP-W-12-013 (Industrial Economics Inc.)

Work Assignment No: 2-06

Prepared by: Mark Eads, ORCR Economist, 703-308-8615 (COTR)

Rachel Horton, ORCR Program Analyst, 703-305-0894 (Alternate COTR)

US Environmental Protection Agency

Office of Resource Conservation & Recovery (ORCR)

Program Management, Communications & Analysis Division (PMCAO)

1200 Pennsylvania Avenue, NW, Mailstop 5305P

Washington, DC 20460

SOW period: Upon receipt to December 31, 2014

Purpose & Scope

The purpose of this work assignment Statement of Work (SOW) is for the Contractor to continue providing analytic support to ORCR for finalizing a "Regulatory Impact Analysis" (RIA) for ORCR's upcoming Coal Combustion Residual (CCR) final rule. EPA is under court-order deadline¹ for the EPA Administrator to sign a CCR final rule by December 19, 2014; publication of the CCR final rule by the Government Printing Office in the Federal Register would follow in January or February 2015. The CCR final rule would implement RCRA Subtitle D regulation of CCR landfills and CCR surface impoundments. This rule will affect about 500 coal-fired electric utility plants.

Because the deadline for the CCR final rule is December 19, 2014, the COTR has designated the end of December 2014 as the closure date for the period of performance for this work assignment.

This work assignment falls under the scope of Task 2 "*Regulatory Assessment: Costs Benefits, Economic and other Impacts*" within EPA contract EP-W-12-013. This work assignment builds upon and the Contractor's work performed for ORCR under two prior work assignments B-06 and 1-06:

- WA B-06 (base year April 30, 2012 to April 29, 2013): Under B-06 the Contractor developed (1) a June 30, 2012 draft RIA document (294 pages with a separate draft RIA "Appendices" document of 586 pages) for the December 2012 CCR final rule, and (2) draft "Responses to Public Comments"² on the RIA for ORCR's June 2010 proposed CCR rule. However, when the COTR formulated work assignment B-06, ORCR planned on publishing the CCR final rule by December 2012. Because the CCR final rule schedule was delayed by court litigation stemming from multiple stakeholder lawsuits beginning in April 2012, the Contractor was only able to perform about one-third of B-06.
- WA 1-06 (1st option year April 30, 2013 to April 29, 2014): WA 1-06 continued the Contractor's work not completed under B-06, and added a new Task for the Contractor to assist ORCR with coordinating the common elements of the methods/data of the RIA for the CCR final rule, with the EPA Office of Water's

¹ On January 29, 2014 the DC District Court ordered the EPA to complete a CCR final rule for signature by the EPA Administrator no later than December 19, 2014. This date was established in a Consent Decree signed by all parties to the April 2012 Appalachian Voices vs EPA lawsuit. Section III (page 5) of the Consent Decree states:

"The EPA Administrator shall, by December 19, 2014, sign for publication in the Federal Register a notice taking final action regarding EPA's proposed revision of RCRA Subtitle D regulations pertaining to coal combustion residuals."

² ORCR received about 1,100 public comments on the RIA for the June 2010 proposed CCR rule from 403 commenters.

RIA for its upcoming 2015 “*Steam Electric Generator Effluent Guideline Limitations*” (ELG) rule. Under WA 1-06 the Contractor produced an April 29, 2014 revised draft RIA for the 2015 CCR final rule, but because of the two-year (April 2012 to January 2014) litigation delay to the CCR final rule schedule, was unable to finalize the draft comment responses from B-06.

This SOW consists of five tasks:

- Task 1: Submit work plan & proposed budget.
- Task 2: Revise the April 29, 2014 draft RIA for the CCR final rule to address:
 - Comments provided in one or more **Technical Directive(s)** from the COTR.
 - Review comments from EPA’s FAR workgroup, EPA’s Office of Policy, or OMB during review of the CCR final rule.
- Task 3: Finalize responses to 1,100 public comments on EPA’s RIA for the 2010 CCR proposed rule.
- Task 4: Continue supporting ORCR’s coordination of the common elements of the data/methods in the RIA for the 2015 CCR final rule, with EPA Office of Water’s RIA for its 2015 “*Steam Electric Generator Effluent Guideline Limitations*” (ELG) final rule.
- Task 5: Supply ORCR with output data from the RIA’s cost analysis for use by EPA’s Clean Air Markets Division for IPM modeling of the CCR final rule.

Task 1: Submit Work Plan & Budget

Supply EPA with a proposed work plan, deliverables schedule, and cost for completing the Tasks described in this SOW.

For each of the Tasks in this SOW which involve “*environmental data*” or “*environmental technology*” --- as defined according to EPA’s mandatory quality management system³ --- the Contractor shall describe in its work plan, how the Contractor plans to apply quality control (QC), and indicate in the work plan that the Contractor shall include a brief (e.g., one paragraph or less) summary of QC activities in the monthly progress/invoice reports to the COTR for this work assignment. Because the types of environmental data or environmental technology involved in this SOW may mostly pertain to environmental data (not to technology) from existing secondary sources which have already been subject to QC (e.g., peer-reviewed journals, and other Federal agencies such as the Energy Information Administration, the Census Bureau, and the Bureau of Labor Statistics), the QC activities for this SOW might only require the Contractor to (a) examine data, calculations, and calculation results (e.g., evaluate numerical outliers), and (b) double-check spreadsheet formulae.

Task 1 Deliverable:

- Proposed work plan, deliverables schedule, and cost estimate (budget).

³ As listed below, EPA’s mandatory quality management system covers two areas (source: definitions below are from page 8 of EPA’s “Quality Policy” document nr. CIO 2106.0, October 2011). Some of the work tasks of this SOW involve the use (i.e., analysis) of environmental data, but none of the tasks in this SOW involve the use of environmental technology.

- Environmental data: Any measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology. For EPA, environmental data include information collected directly from measurements, produced from models, and compiled from other sources such as databases or literature.
- Environmental technology: An all-inclusive term used to describe pollution monitoring, measurement and control devices and systems, waste treatment processes and storage facilities, and site remediation technologies and their components that may be utilized to remove pollutants or contaminants from or prevent them from entering the environment.

Additional information about EPA’s quality management system is available at <http://www.epa.gov/quality/>

Task 2: Finalize the April 29, 2014 Draft RIA for the 2015 CCR Final Rule

Under the prior work assignment 1-06 for contract EP-W-12-013, the Contractor produced a draft RIA deliverable (with a separate appendix deliverable) dated April 29, 2014 for the “*Modified D-Prime*” regulatory approach selected by EPA for the upcoming 2015 CCR final rule. In addition, under the prior work assignment 1-06 the Contractor produced cost and benefit estimate tables for the “*D-Prime*” regulatory option from EPA’s June 2010 proposed CCR rule. The Contractor shall finalize both the (a) April 29, 2014 draft RIA (and appendices) for the CCR final rule and (b) the cost and benefit estimates for the “*D-Prime*” option, according to revisions and specifications to be provided in one or more **Technical Directive(s)** from the COTR. As of the date of this SOW, the COTR is not able to identify all such necessary revisions or specifications because those could originate between the months of May and November 2014 from one or more of the following five sources (note: the dates indicated below for each source are based on ORCR’s October 24, 2013 version of the development schedule for the CCR final rule):

1. COTR: Quality control (QC) review comments by the COTR (scheduled May & June 2014).
2. ORCR: Quality control (QC) review or revisions specified by ORCR management (concurrent with COTR’s QC).
3. EPA-OP: QC review comments by EPA’s Office of Policy (concurrent with COTR’s QC).
4. FAR: Review comments from EPA’s FAR workgroup (distribution of final RIA to FAR workgroup scheduled July 21, 2014, and FAR closure on August 11, 2014).
5. OMB: Review comments from OMB during review of the CCR final rule (scheduled September 2 to December 2, 2014).

For purpose of helping the Contractor formulate a realistic workplan and budget for Task 2, the Contractor shall assume the following types of potential revisions (listed in random order below not by importance or magnitude):

1. One or more technical requirements of the CCR final rule.
2. The “cumulative cost” section of the draft RIA.
3. The “employment impact” section of the draft RIA.
4. One or more of the monetized benefit categories of the draft RIA (e.g., revisions to the CCR impoundment structural failure probability assumptions).
5. One or more of the pollution control costs or other cost estimates in the draft RIA (e.g., revisions to corrective action cost assumptions).
6. One or more of the sensitivity analyses in the draft RIA (e.g., revisions to the alternative CCR impoundment structural failure probability and/or capacity factor scenarios).

Task 2 Deliverable(s):

- ORCR’s schedule for CCR final rule development consists of three distinct sequential review periods:
 1. May & June 2014: COTR, ORCR, and EPA-OP.
 2. July 21 to August 11, 2014): FAR review.
 3. September 2 to December 2, 2014: OMB review.

Consequently, the Contractor shall prepare at least two sequential iteration deliverables for the final RIA (including RIA appendices) as indicated in the “Schedule of Deliverables” of this SOW:

- The 1st iteration draft RIA is mandatory;
- The 2nd iteration draft RIA is potential pending outcome of FAR and OMB review of the 1st iteration draft RIA.

Task 3: Finish Responses to 1,100 Public Comments on ORCR’s RIA for the 2010 Proposed CCR Rule

There are a total of about 410,000 public comments on ORCR’s June 2010 CCR proposed rule, of which about 1,100 comments are on ORCR’s RIA for the 2010 CCR proposed rule. The table below lists the seven main topics ORCR used to bracket the 1,100 public comments. Under the base year work assignment B-06, the Contractor began Task 2 and provided the COTR with an initial draft of responses to many, but not all, of the comments on the 2010 RIA. Thus, this task is a continuation of Task 2 of the Contractor’s prior work assignment B-06. After the Contractor receives under this work assignment, review feedback from the COTR on the Contractor’s initial draft responses to public comments, the Contractor shall continue and complete this task.

Task 3 Deliverables:

- MSWord document containing the Contractor’s responses to the 1,100 public comments.

Count of Public Comments on ORCR’s RIA for the June 2010 CCR Proposed Rule		
Bracket Item*	RIA Sub-Topic Categories	Count of Public Comments
9.1	General comments on RIA	12
9.2	Other general comments (e.g., about economic issues)	254
9.3	Regulatory costs	371
9.4	Regulatory environmental & economic benefits	99
9.5	Impacts on CCR beneficial uses	231
9.6	Net benefits	37
9.7	Supplemental analyses	63
Total public comments on the 2010 RIA =		1,067
* Bracket item numbers correspond to ORCR’s final version (dated 3/24/2011) of the CommentWorks bracketing outline ORCR used to categorize the 2010 CCR proposed rule public comments into issue areas (i.e., topics and sub-topics categories).		

Task 4: Assist ORCR With Coordinating the Common Elements of the CCR RIA with EPA Office of Water’s Steam Electric ELG Final Rule RIA

As the need arises according to **Technical Directive** from the COTR, the Contractor shall assist ORCR with coordinating the common elements (i.e., methods, data, cost estimates, benefit estimates) of the RIA for the 2015 CCR final rule, with the RIA for the EPA Office of Water’s upcoming 2015 “*Steam Electric Power Generating Effluent Limitations Guidelines*” (ELG) final rule.⁴ Both of these two final rules will affect an overlapping set of the same waste management units (i.e. CCR surface impoundments or “ponds”) located at coal-fired electric utility plants. This task is a continuation of Task 4 under the Contractor’s prior work assignment 1-06.

Task 4 Deliverables:

- Excel spreadsheets and small memoranda according to the COTR’s Technical Directive.
- Contractor’s assistance under Task 4 may also consist of participation on monthly conference calls with ORCR and EPA Office of Water’s ELG rulemaking team.

⁴ On April 9, 2014 a US District Court issued a litigation agreement between and environmental organizations, giving EPA’s Office of Water a September 30, 2015 deadline for completing its ELG final rule.

Task 5: Supply ORCR with Data/Outputs from the CCR RIA for EPA's IPM Modeling Project for the CCR Final Rule

On March 24, 2014 EPA's Office of Policy requested ORCR to work with EPA's Clean Air Markets Division (CAMD) to use the "*Integrated Planning Model*" (IPM) to evaluate the potential impacts of the CCR final rule on the US nationwide electricity grid. ORCR and CAMD anticipate the duration of this IPM project will span three months mid-May to mid-August 2014. CAMD standardly uses the IPM to evaluate potential impacts of EPA's air regulations. CAMD plans to use its IPM contractor (ICF Inc.) for this project. This IPM modeling project will be a self-standing separate project from the CCR RIA. CAMD will produce a separate document (report) describing this IPM project and its modeling results for the CCR final rule.

For purpose of supporting ORCR's participation with CAMD and ICF Inc. to set-up and run the IPM for the CCR final rule, the Contractor shall supply ORCR with output data from the RIA's cost analysis for use by CAMD for this IPM project. The output data file (Excel spreadsheet) shall include the following elements pertaining to utility industry compliance cost for the CCR final rule:

- Column A: EIA power plant ID number.
- Column B: Power plant utility company name.
- Column C: Plant name.
- Column D: City.
- Column E: State.
- Column F: Plant megawatt hour (MWH) capacity.
- Column G: CCR final rule annual cost estimate for each power plant (@7% discount rate).
- Column H: MWH unitized annual cost (Col. G / Col. F).
- Column I: MWH unitized capital cost (Col. H x 22%).
- Column J: MWH unitized O&M cost (Col. H x 68%).
- Column K: Fixed O&M cost (Col. J x X%).
- Column L: Variable O&M cost [(Col. J x (100% - X%))].

Task 5 Deliverables:

- Excel spreadsheet cost data/outputs from the CCR RIA according to COTR's Technical Directives.

Schedule of Deliverables

The Contractor shall provide electronic versions of all deliverables via email. The Contractor shall also provide in electronic format to the COTR, any accompanying computer models, databases, and/or spreadsheets used to produce the deliverables.

Schedule of Deliverables		
Task & Deliverable		Deliverable Due Dates
Task 1	Provide work plan with a list of deliverables and corresponding due dates, and cost quote.	<u>Draft:</u> According to the terms of contract EP-W-12-013 (i.e., within 20 calendar days) <u>Final:</u> According to the terms of contract EP-W-12-013 (i.e., within 20 calendar days after receipt of COTR comments)
Task 2	Finalize the April 29, 2014 draft RIA for the CCR final rule, based on one or more Technical Directives from the COTR.	<u>Draft:</u> The Contractor already supplied a revised draft RIA on April 29, 2014 under the prior work assignment 1-06. <u>Final:</u> Per the COTR's description of Task 2 above in this SOW, the Contractor shall anticipate two potential sequential iterations of a final RIA deliverable: <ul style="list-style-type: none"> • Iteration #1 of 2 (mandatory): Not later than July 18, 2014 (which is prior to the July 21, 2014 distribution to FAR workgroup). • Iteration #2 of 2 (potential): Not later than September 2, 2014 (OMB review start), or potentially not later than December 2, 2014 (OMB review closure). (Note: COTR selected these dates in relation to the July 21, 2014 scheduled start of FAR review of the CCR final rule package, which includes FAR review of the final RIA).
Task 3	Finish drafting responses to the 1,100 public comments on EPA's RIA for the 2010 CCR proposed rule.	<u>Draft:</u> The Contractor already supplied draft responses under the base year work assignment B-06. <u>Final:</u> No later than July 18, 2014. (Note: COTR selected this specific date in relation to the July 21, 2014 scheduled start of FAR review of the CCR final rule package, which includes FAR review of finalized comment responses).
Task 4	Assist ORCR with coordinating the common elements of the CCR RIA with EPA Office of Water's Steam Electric ELG final rule RIA	<u>Draft:</u> According to COTR Technical Directive; most Task 4 coordination activities (e.g. conference calls with ORCR and EPA-OW) probably needed May to August 2014. <u>Final:</u> The COTR does not anticipate the need for final deliverables for this task (this is a coordination task largely involving cost estimate outputs from the CCR final RIA).
Task 5	Supply ORCR with data/outputs from the CCR RIA for EPA-CAMD's IPM modeling project for the CCR final rule	<u>Draft:</u> According to COTR Technical Directive between the mid-March and mid-August 2014 duration of CAMD's IPM project. <u>Final:</u> The COTR does not anticipate the need for final deliverables for this task (this task involves the Contractor providing data to ORCR for use by EPA-CAMD to set-up and run the IPM model).

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-6				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period 04/30/2014 To 04/29/2015 Base Option Period Number 2			Title of Work Assignment/SF Site Name RIA for ORCR's CCR Final Rule				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW All tasks					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2014 To 04/29/2015				
Comments: The purpose of this amendment is to approve the contractor's work dated May 23rd, 2014 with Level of Efforts, (LOE) at 760 and cost plus fee at \$77,739.36((b)(4)) cost((b)(4)) fee). The contractor is not authorized to go over the approved LOE and cost plus fee ceiling for this work assignment without prior approval from the contracting officer.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2014 To 04/29/2015				760						
This Action:				0						
Total:				760						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Mark Eads <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 703-308-8615 FAX Number:				
Project Officer Name Shannon Sturgeon <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 703-605-0509 FAX Number: 703-308-7903				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Eulvid Rocque <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-8316 FAX Number:				

Work Assignment Form, (WebForms v1.0)

Amended Statement of Work
WA 2-06 (EP-W-12-013)
19 Aug 2014

Original date: 28 April 2014

Note: The COTR's requested amendments are indicated in yellow highlight below.

Project Title: Regulatory Impact Analysis for ORCR's 2015 Coal Combustion Residuals Final Rule
Contract No.: EP-W-12-013 (Industrial Economics Inc.)

Work Assignment No: 2-06

Prepared by: Mark Eads, ORCR Economist, 703-308-8615 (COTR)
Rachel Horton, ORCR Program Analyst, 703-305-0894 (Alternate COTR)
US Environmental Protection Agency
Office of Resource Conservation & Recovery (ORCR)
Program Management, Communications & Analysis Division (PMCAO)
1200 Pennsylvania Avenue, NW, Mailstop 5305P
Washington, DC 20460

SOW period: Upon receipt to ~~December 31, 2014~~ April 29, 2015 (end of Option Period 2)

Purpose & Scope

The purpose of this work assignment Statement of Work (SOW) is for the Contractor to continue providing analytic support to ORCR for finalizing a "Regulatory Impact Analysis" (RIA) for ORCR's upcoming Coal Combustion Residual (CCR) final rule. EPA is under court-order deadline¹ for the EPA Administrator to sign a CCR final rule by December 19, 2014; publication of the CCR final rule by the Government Printing Office in the Federal Register would follow in January or February 2015. The CCR final rule would implement RCRA Subtitle D regulation of CCR landfills and CCR surface impoundments. This rule will affect about 500 coal-fired electric utility plants.

~~*Because the deadline for the CCR final rule is December 19, 2014, the COTR has designated the end of December 2014 as the closure date for the period of performance for this work assignment.*~~

This work assignment falls under the scope of Task 2 "Regulatory Assessment: Costs Benefits, Economic and other Impacts" within EPA contract EP-W-12-013. This work assignment builds upon and the Contractor's work performed for ORCR under two prior work assignments B-06 and 1-06:

- WA B-06 (base year April 30, 2012 to April 29, 2013): Under B-06 the Contractor developed (1) a June 30, 2012 draft RIA document (294 pages with a separate draft RIA "Appendices" document of 586 pages) for the December 2012 CCR final rule, and (2) draft "Responses to Public Comments"² on the RIA for ORCR's June 2010 proposed CCR rule. However, when the COTR formulated work assignment B-06, ORCR planned on publishing the CCR final rule by December 2012. Because the CCR final rule schedule was delayed by court litigation stemming from multiple stakeholder lawsuits beginning in April 2012, the Contractor was only able to perform about one-third of B-06.

¹ On January 29, 2014 the DC District Court ordered the EPA to complete a CCR final rule for signature by the EPA Administrator no later than December 19, 2014. This date was established in a Consent Decree signed by all parties to the April 2012 Appalachian Voices vs EPA lawsuit. Section III (page 5) of the Consent Decree states:

"The EPA Administrator shall, by December 19, 2014, sign for publication in the Federal Register a notice taking final action regarding EPA's proposed revision of RCRA Subtitle D regulations pertaining to coal combustion residuals."

² ORCR received about 1,100 public comments on the RIA for the June 2010 proposed CCR rule from 403 commenters.

- WA 1-06 (1st option year April 30, 2013 to April 29, 2014): WA 1-06 continued the Contractor's work not completed under B-06, and added a new Task for the Contractor to assist ORCR with coordinating the common elements of the methods/data of the RIA for the CCR final rule, with the EPA Office of Water's RIA for its upcoming 2015 "*Steam Electric Generator Effluent Guideline Limitations*" (ELG) rule. Under WA 1-06 the Contractor produced an April 29, 2014 revised draft RIA for the 2015 CCR final rule, but because of the two-year (April 2012 to January 2014) litigation delay to the CCR final rule schedule, was unable to finalize the draft comment responses from B-06.

This SOW consists of five tasks:

- Task 1: *Submit amended workplan, amended schedule of deliverables, & amended proposed budget.*
- Task 2: ~~*Revise the April 29, 2014 draft RIA.*~~ *Produce an RIA "Addendum" containing revisions to the cost and benefit estimates of the July 2014 RIA to address:*
- Comments provided in one or more **Technical Directive(s)** from the COTR.
 - *Additional* review comments from EPA's FAR workgroup, EPA's Office of Policy, or OMB during review of the CCR final rule.
- Task 3: Finalize responses to 1,100 public comments on EPA's RIA for the 2010 CCR proposed rule.
- Task 4: Continue supporting ORCR's coordination of the common elements of the data/methods in the RIA for the 2015 CCR final rule, with EPA Office of Water's RIA for its 2015 "*Steam Electric Generator Effluent Guideline Limitations*" (ELG) final rule.
- Task 5: Supply ORCR with output data from the *amended Task 2 RIA "Addendum"* cost analysis, for use by EPA's Clean Air Markets Division (CAMD) for Integrated Planning Modeling (IPM) of the CCR final rule.

Task 1: Submit Work Plan & Budget

The Contractor shall submit a revised work plan, revised schedule of deliverables, and revised cost for this requested amendment.

~~Supply EPA with a proposed work plan, deliverables schedule, and cost for completing the Tasks described in this SOW.~~

For each of the Tasks in this SOW which involve "*environmental data*" or "*environmental technology*" --- as defined according to EPA's mandatory quality management system³ --- the Contractor shall describe in its work plan, how the Contractor plans to apply quality control (QC), and indicate in the work plan that the Contractor shall include a brief (e.g., one paragraph or less) summary of QC activities in the monthly progress/invoice reports to the COTR for this work assignment. Because the types of environmental data or environmental technology involved in this SOW may mostly pertain to environmental data (not to

³ As listed below, EPA's mandatory quality management system covers two areas (source: definitions below are from page 8 of EPA's "Quality Policy" document nr. CIO 2106.0, October 2011). Some of the work tasks of this SOW involve the use (i.e., analysis) of environmental data, but none of the tasks in this SOW involve the use of environmental technology.

- Environmental data: Any measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology. For EPA, environmental data include information collected directly from measurements, produced from models, and compiled from other sources such as databases or literature.
- Environmental technology: An all-inclusive term used to describe pollution monitoring, measurement and control devices and systems, waste treatment processes and storage facilities, and site remediation technologies and their components that may be utilized to remove pollutants or contaminants from or prevent them from entering the environment.

Additional information about EPA's quality management system is available at <http://www.epa.gov/quality/>

technology) from existing secondary sources which have already been subject to QC (e.g., peer-reviewed journals, and other Federal agencies such as the Energy Information Administration, the Census Bureau, and the Bureau of Labor Statistics), the QC activities for this SOW might only require the Contractor to (a) examine data, calculations, and calculation results (e.g., evaluate numerical outliers), and (b) double-check spreadsheet formulae.

Task 1 Deliverable:

- Proposed work plan, deliverables schedule, and cost estimate (budget).

**Task 2: *~~Finalize the April 29, 2014 Draft RIA for the 2015 CCR Final Rule~~*
*Produce an “Addendum” Containing Revisions to the Cost and Benefit Estimates of the July 2014 RIA***

Under the prior work assignment 1-06 for contract EP-W-12-013, the Contractor produced a draft RIA deliverable (with a separate appendix deliverable) dated April 29, 2014 for the “*Modified D-Prime*” regulatory approach selected by EPA for the upcoming 2015 CCR final rule. In addition, under the prior work assignment 1-06 the Contractor produced cost and benefit estimate tables for the “*D-Prime*” regulatory option from EPA’s June 2010 proposed CCR rule. The Contractor shall finalize both the (a) April 29, 2014 draft RIA (and appendices) for the CCR final rule and (b) the cost and benefit estimates for the “*D-Prime*” option, according to revisions and specifications to be provided in one or more **Technical Directive(s)** from the COTR. As of the date of this SOW, the COTR is not able to identify all such necessary revisions or specifications because those could originate between the months of May and November 2014 from one or more of the following five sources (note: the dates indicated below for each source are based on ORCR’s October 24, 2013 version of the development schedule for the CCR final rule):

1. COTR: Quality control (QC) review comments by the COTR (scheduled May & June 2014).
2. ORCR: Quality control (QC) review or revisions specified by ORCR management (concurrent with COTR’s QC).
3. EPA-OP: QC review comments by EPA’s Office of Policy (concurrent with COTR’s QC).
4. FAR: Review comments from EPA’s FAR workgroup (distribution of final RIA to FAR workgroup scheduled July 21, 2014, and FAR closure on August 11, 2014).
5. OMB: Review comments from OMB during review of the CCR final rule (scheduled September 2 to December 2, 2014).

For purpose of helping the Contractor formulate a realistic workplan and budget for Task 2, the Contractor shall assume the following types of potential revisions (listed in random order below not by importance or magnitude):

1. One or more technical requirements of the CCR final rule.
2. The “cumulative cost” section of the draft RIA.
3. The “employment impact” section of the draft RIA.
4. One or more of the monetized benefit categories of the draft RIA (e.g., revisions to the CCR impoundment structural failure probability assumptions).
5. One or more of the pollution control costs or other cost estimates in the draft RIA (e.g., revisions to corrective action cost assumptions).
6. One or more of the sensitivity analyses in the draft RIA (e.g., revisions to the alternative CCR impoundment structural failure probability and/or capacity factor scenarios).

Task 2 Deliverable(s):

- ORCR’s schedule for CCR final rule development consists of three distinct sequential review periods:
 1. May & June 2014: COTR, ORCR, and EPA-OP.

2. ~~July 21 to August 11, 2014~~ September 15 to October 6, 2014: FAR review.
3. ~~September 2 to December 2, 2014~~ October 10 to December 12, 2014: OMB review.

Consequently, the Contractor shall prepare at least two sequential iteration deliverables for the final RIA (including RIA appendices) as indicated in the “Schedule of Deliverables” of this SOW:

- The 1st iteration draft RIA is mandatory;
- The 2nd iteration draft RIA is potential pending outcome of FAR and OMB review of the 1st iteration draft RIA.

As of the date of this requested amendment, the Contractor has produced both the 1st iteration draft RIA (May 20, 2014) deliverable, and the 2nd iteration draft RIA (July 16, 2014) deliverable, as itemized above in the COTR’s original Task 2. However, ORCR needs two additional iterations of not the entire RIA document, but of the regulatory cost and benefit estimates from the July 2014 RIA. These two additional iterations shall take the form of an RIA “Addendum” document (approximately 30 to 60 pages) deliverable according to the following schedule:

- *Initial draft RIA “Addendum”: not later than September 8, 2014.*
- *Finalized RIA “Addendum” (which incorporates OMB review comments): not later than December 12, 2014.*

Although the Contractor’s May 23, 2014 workplan for Task 2 already indicates the production of an RIA “Addendum” after producing the July 2014 RIA, the Contractor’s initial budget for Task 2 assumed (a) the COTR would deliver “one coordinated set” of comments on the July 2014 RIA to the Contractor, and (b) EPA’s comments on the July 2014 RIA “will not require new model programming or significant new analyses.” However, because three EPA offices have been involved in reviewing the July 2014 RIA (ORCR, EPA Office of Policy, and EPA Office of Water) over the months of July and August 2014, the COTR has not been able to provide a single set of comments. Furthermore, as listed below the revisions the Contractor needs to make to address the review comments for the RIA “Addendum” require new model programming and new analyses in at least two instances, which requires additional LOE above that anticipated in the COTR’s April 2014 IGCE and in the COTR’s April 28, 2014 initial Statement of Work.

Under this requested amendment to Task 2, the Contractor shall make the following modifications to the cost and benefit calculations used to produce the July 2014 RIA, prior to producing the revised cost and benefits for the RIA “Addendum” requested under this amendment to Task 2. As of the date of this amendment, the COTR is aware of the following six required revisions:

1. *Coal forecast:* Two requested amendments for this item:
 - a. *IPM forecast:* Replace the Energy Information Administration (EIA) 2014 Annual Energy Outlook (AEO) coal consumption “reference case” forecast applied in the July 2014 RIA cost and benefit calculations, with the IPM v5.13 coal consumption forecast.
 - b. *EIA 2014 low coal forecast:* Perform a cost and benefit estimation sensitivity analysis for the RIA “Addendum” document based on applying the EIA’s 2014 AEO “low coal” alternative forecast.
2. *SCC:* For the RIA “Addendum” update the “social cost of carbon” (SCC) based on the revised November 2013 Federal inter-agency guidance (\$37 per metric ton), rather than the prior May 2013 \$38/ton as applied in the July 2014 RIA
3. *FGD tank cost:* Revise the \$/ton fluidized gas desulfurization (FGD) impoundment to tank conversion cost assumption based on the information supplied on August 12, 2014 to the COTR by EPA’s Office of Water (the COTR already forwarded this EPA-OW information to the Contractor on August 12, 2014).
4. *CCR storage ponds:* Revise the 25% numerical assumption applied in the cost and benefit calculations to use the 12.9% number as the Contractor calculated on August 12, 2014, based on the data supplied the COTR on August 12, 2014 by the EPA Office of Water (the COTR already supplied the EPA-OW data to the Contractor on August 12, 2014).
5. *Impoundment failure rate & release capacity factors:* On July 15, 2014 the EPA Office of Policy requested ORCR to estimate benefits for the CCR final rule based on alternative numerical factors assigned to:
 - a. Impoundment failure rates (four changes)
 - b. Impoundment release “capacity factors” (two changes).

Note: The COTR supplied the alternative numerical factors (a total of six) to the Contractor on 18 Aug 2014.

6. *Flexibility feature:* *On August 7, 2014 the ORCR-MRWMD lead division for development of the CCR final rule provided the COTR with a proposed modification to the CCR final rule which would add two “compliance deadline flexibility features” (on August 11, 2014 the COTR already forwarded the ORCR-MRWMD’s 3-page description of these two new features, as well as ORCR’s spreadsheet containing data and estimates of the upper-bound respective subsets of power plants which may be candidates for each flexibility feature):*
 - a. *Flexibility for power plants which “lack alternative CCR disposal capacity”.*
 - b. *Flexibility for power plants which “plan to cease burning coal”.*

No later than August 18, 2014 the COTR will supply the Contractor with a skeleton draft template of the RIA “Addendum” for the Contractor to use for completing it under this requested amendment to Task 2.

Task 3: Finish Responses to 1,100 Public Comments on ORCR’s RIA for the 2010 Proposed CCR Rule

There are a total of about 410,000 public comments on ORCR’s June 2010 CCR proposed rule, of which about 1,100 comments are on ORCR’s RIA for the 2010 CCR proposed rule. The table below lists the seven main topics ORCR used to bracket the 1,100 public comments. Under the base year work assignment B-06, the Contractor began Task 2 and provided the COTR with an initial draft of responses to many, but not all, of the comments on the 2010 RIA. Thus, this task is a continuation of Task 2 of the Contractor’s prior work assignment B-06. After the Contractor receives under this work assignment, review feedback from the COTR on the Contractor’s initial draft responses to public comments, the Contractor shall continue and complete this task.

Task 3 Deliverables:

- MSWord document containing the Contractor’s responses to the 1,100 public comments.

Count of Public Comments on ORCR’s RIA for the June 2010 CCR Proposed Rule		
Bracket Item*	RIA Sub-Topic Categories	Count of Public Comments
9.1	General comments on RIA	12
9.2	Other general comments (e.g., about economic issues)	254
9.3	Regulatory costs	371
9.4	Regulatory environmental & economic benefits	99
9.5	Impacts on CCR beneficial uses	231
9.6	Net benefits	37
9.7	Supplemental analyses	63
Total public comments on the 2010 RIA =		1,067
* Bracket item numbers correspond to ORCR’s final version (dated 3/24/2011) of the CommentWorks bracketing outline ORCR used to categorize the 2010 CCR proposed rule public comments into issue areas (i.e., topics and sub-topics categories).		

Task 4: Assist ORCR with Coordinating the Common Elements of the CCR RIA with EPA Office of Water’s Steam Electric ELG Final Rule RIA

The Contractor shall amend Task 4 by adding additional LOE to continue performing Task 4 beyond the LOE anticipated in the COTR’s initial April 2014 IGCE and initial Statement of Work, and beyond the anticipated LOE assumed in the Contractor’s May 23, 2014 workplan and budget for this task.

In the months of May, June, July, and August 2014, there have already been an unexpected high volume of conference calls, email communications, and exchanges and reviews of documents under Task 4 involving the Contractor as well as ORCR, the EPA Office of Water, and the EPA Office of Policy. The COTR requests the Contractor to amend Task 4 with additional LOE in proportion to its May 23, 2014 workplan and budget, to anticipate continuing to perform a relatively high volume of coordination activities with EPA Office of Water over the next six months (i.e., Sept 2014 to Feb 2015).

As the need arises according to **Technical Directive** from the COTR, the Contractor shall assist ORCR with coordinating the common elements (i.e., methods, data, cost estimates, benefit estimates) of the RIA for the 2015 CCR final rule, with the RIA for the EPA Office of Water's upcoming 2015 "*Steam Electric Power Generating Effluent Limitations Guidelines*" (ELG) final rule.⁴ Both of these two final rules will affect an overlapping set of the same waste management units (i.e. CCR surface impoundments or "ponds") located at coal-fired electric utility plants. This task is a continuation of Task 4 under the Contractor's prior work assignment 1-06.

Task 4 Deliverables:

- Excel spreadsheets and small memoranda according to the COTR's Technical Directive.
- Contractor's assistance under Task 4 may also consist of participation on monthly conference calls with ORCR and EPA Office of Water's ELG rulemaking team.

Task 5: Supply ORCR with Data/Outputs from the CCR RIA for EPA's IPM Modeling Project for the CCR Final Rule

The Contractor shall amend Task 5 by adding additional LOE to continue performing Task 5 beyond the LOE anticipated in the COTR's initial April 2014 IGCE and initial Statement of Work, and beyond the anticipated LOE assumed in the Contractor's May 23, 2014 workplan and budget for Task 5.

Based on phone and email communications in July and August 2014 between the COTR and (a) EPA's Clean Air Markets Division (CAMD) which plans to run the IPM model for the CCR rule as specified in the original Task 5 below, and (b) EPA Office of Policy which is instructing both CAMD and ORCR on the policy settings for CAMD to use in running the IPM model, ORCR will need additional Contractor LOE to perform Task 5.

The additional LOE is required because the data file format required for CAMD to run the IPM model for the CCR final rule is (a) much more detailed than the Column G structure indicated in the original Task 5 below, and (b) possibly two or three iterations of the data file may be required to address multiple policy settings for the IPM model as specified by EPA's Office of Policy.

The COTR requests the Contractor to amend Task 5 with additional LOE to anticipate preparing a more detailed and multiple iterations of the data file, as well as participating with ORCR in multiple conference calls with CAMD, over the next three months (i.e., Sept 2014 to Nov 2014).

On March 24, 2014 EPA's Office of Policy requested ORCR to work with EPA's Clean Air Markets Division (CAMD) to use the "*Integrated Planning Model*" (IPM) to evaluate the potential impacts of the CCR final rule on the US nationwide electricity grid. ORCR and CAMD anticipate the duration of this IPM project will span three months mid-May to mid-August 2014. CAMD standardly uses the IPM to evaluate potential impacts of EPA's air regulations. CAMD plans to use its IPM contractor (ICF Inc.) for this project. This IPM modeling project will be a self-standing separate project from the CCR RIA. CAMD will produce a separate document (report) describing this IPM project and its modeling results for the CCR final rule.

⁴ On April 9, 2014 a US District Court issued a litigation agreement between and environmental organizations, giving EPA's Office of Water a September 30, 2015 deadline for completing its ELG final rule.

For purpose of supporting ORCR's participation with CAMD and ICF Inc. to set-up and run the IPM for the CCR final rule, the Contractor shall supply ORCR with output data from the RIA's cost analysis for use by CAMD for this IPM project. The output data file (Excel spreadsheet) shall include the following elements pertaining to utility industry compliance cost for the CCR final rule:

- Column A: EIA power plant ID number.
- Column B: Power plant utility company name.
- Column C: Plant name.
- Column D: City.
- Column E: State.
- Column F: Plant megawatt hour (MWH) capacity.
- Column G: CCR final rule annual cost estimate for each power plant (@7% discount rate); *Note: under this requested amendment the COTR anticipates that a more detailed (more complex) data file may be needed which provides year-by-year cost estimates for each power plant for the 100-year period of analysis 2015-2114 from the cost results of the September 2014 RIA "Addendum" under amended Task 2 above. The COTR's initial specification of Column G assumed a much simpler single "annual" average cost number for each power plant, not 100 cost numbers for each power plant.*
- Column H: MWH unitized annual cost (Col. G / Col. F).
- Column I: MWH unitized capital cost (Col. H x ~~22%~~ 89%).
- Column J: MWH unitized O&M cost (Col. H x ~~68%~~ 11%).
- Column K: Fixed O&M cost (Col. J x ~~X%~~ 89%).
- Column L: Variable O&M cost [(Col. J x ~~(100%—X%)~~ 11%).

Task 5 Deliverables:

- Excel spreadsheet cost data/outputs from the CCR RIA according to COTR's Technical Directives.

Schedule of Deliverables

The Contractor shall provide a revised Schedule of Deliverables for this requested amendment.

The Contractor shall provide electronic versions of all deliverables via email. The Contractor shall also provide in electronic format to the COTR, any accompanying computer models, databases, and/or spreadsheets used to produce the deliverables.

Schedule of Deliverables		
Task & Deliverable		Deliverable Due Dates
Task 1	Provide <i>amended</i> work plan with an <i>amended</i> list of deliverables and corresponding due dates, and <i>amended</i> cost quote.	<p><u>Draft</u>: According to the terms of contract EP-W-12-013 (i.e., within 20 calendar days)</p> <p><u>Final</u>: According to the terms of contract EP-W-12-013 (i.e., within 20 calendar days after receipt of COTR comments)</p>
Task 2	<p>Finalize the April 29, 2014 draft RIA for the CCR final rule, based on one or more Technical Directives from the COTR.</p> <p>Produce an “Addendum” Containing Revisions to the Cost and Benefit Estimates of the July 2014 RIA</p>	<p><u>Draft</u>: The Contractor already supplied a revised draft RIA on April 29, 2014 under the prior work assignment 1-06.</p> <p><i>Initial draft RIA “Addendum”: not later than September 8, 2014.</i></p> <p><u>Final</u>: <i>Per the COTR’s description of Task 2 above in this SOW, the Contractor shall anticipate two potential sequential iterations of a final RIA deliverable:</i></p> <ul style="list-style-type: none"> • <i>Iteration #1 of 2 (mandatory): Not later than July 18, 2014 (which is prior to the July 21, 2014 distribution to FAR workgroup).</i> • <i>Iteration #2 of 2 (potential): Not later than September 2, 2014 (OMB review start), or potentially not later than December 2, 2014 (OMB review closure).</i> <p><i>(Note: COTR selected these dates in relation to the July 21, 2014 scheduled start of FAR review of the CCR final rule package, which includes FAR review of the final RIA).</i></p> <p><i>Finalized RIA “Addendum” (which incorporates OMB review comments): not later than December 12, 2014</i></p>
Task 3	Finish drafting responses to the 1,100 public comments on EPA’s RIA for the 2010 CCR proposed rule.	<p><u>Draft</u>: The Contractor already supplied draft responses under the base year work assignment B-06.</p> <p><u>Final</u>: No later than July 18, 2014 <i>October 9, 2014 (one day prior to the start of OMB’s review).</i></p> <p><i>(Note: The COTR selected this specific date in relation to the July 21, 2014 scheduled start of FAR review of the CCR final rule package, which includes FAR review of finalized comment responses) scheduled start of OMB’s review according to ORCR-MRWMD’s July 21, 2014 draft production schedule for the CCR final rule.</i></p>
Task 4	Assist ORCR with coordinating the common elements of the CCR RIA with EPA Office of Water’s Steam Electric ELG final rule RIA	<p><u>Draft</u>: According to COTR Technical Directive; most Task 4 coordination activities (e.g. conference calls with ORCR and EPA-OW) probably needed May 2014 to August 2014 <i>February 2015</i>.</p> <p><u>Final</u>: The COTR does not anticipate the need for final deliverables for this task (this is a coordination task largely involving cost estimate outputs from the CCR final RIA).</p>
Task 5	Supply ORCR with data/outputs from the CCR RIA for EPA-CAMD’s IPM modeling project for the CCR final rule	<p><u>Draft</u>: According to COTR Technical Directive between the mid-March and mid-August 2014 <i>June to November 2014</i> duration of CAMD’s IPM project.</p> <p><u>Final</u>: The COTR does not anticipate the need for final deliverables for this task (this task involves the Contractor providing data to ORCR for use by EPA-CAMD to set-up and run the IPM model).</p>

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-6				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000003				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			RIA for CCR final rule				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2014 To 04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's work plan dated 9/8/14, with a level of effort, (LOE) of 880 hours and \$88,935.47 (b)(4) post (b)(4). The total LOE is now 1,640 and \$166,674.83 (b)(4) cost (b)(4) fee). This action also changes the alternate work assignment manager from Rachel Horton to Alan Barnosky.										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 1,640				
04/30/2012 To 04/29/2015										
This Action:						0				
Total:						1,640				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Mark Eads						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-308-8615				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Mark Heare						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-4774				
						FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-6				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000004				
Contract Number EP-W-12-013			Contract Period 04/30/2014 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			CCR RIA				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2014 To 04/29/2015					
Comments: The purpose of this amendment is to change the Work Assignment Manager, (WAM) from Mark Eads to Richard Benware and appoint Rachel Horton as the Alternate Work Assignment Manager.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 1,640						
04/30/2014 To 04/29/2015										
This Action:				0						
Total:				1,640						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Richard Benware							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number 703-308-0436			
							FAX Number:			
Project Officer Name Shannon Sturgeon							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 703-605-0509			
							FAX Number: 703-308-7903			
Other Agency Official Name							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number:			
							FAX Number:			
Contracting Official Name Mark Heare							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 202-564-4774			
							FAX Number:			

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-8				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			Waste Generator Reg. Prog.				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2014 To 04/29/2015					
Comments: This action initiates WA 2-8 entitled "Waste Generator Regulatory Program". Phuc Phan is appointed the WAM and Rachel Horton is appointed the alt. WAM. The LOE for this WA is 194 hours and the statement of work is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2015										
This Action:						194				
Total:						194				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Phuc Phan						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-306-1013				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8316				
						FAX Number:				

EPA CONTRACT NUMBER EP-W-12-013

Statement of Work

Work Assignment Number:

2-08

Title: Economic Analysis and Related Support for: **Improvements to the Hazardous Waste Generator Regulatory Program, and Associated RCRA Work**

Work Assignment Manager (WAM):

Phuc Phan

Address:

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Telephone:

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(703) 308-5268 (front office)
(703) 308-7903 (fax)

Work Assignment Alternate Manager:

Rachel Horton

Address:

ERAS/ORCR/OSWER
Mail Code 5305P
1200 Pennsylvania Ave. N.W.
Washington, D.C. 20460

Telephone:

(703) 305-0894
(703) 308-5268 (front office)
(703) 308-7903 (FAX)

PURPOSE AND SCOPE OF THIS WORK ASSIGNMENT AMENDMENT:

The purpose of this Work Assignment (WA) is to build on work conducted under the previous WA, and amendments. This WA shall continue to ensure the continued work necessary to complete the final economic analysis (EA). The scope of this WA may include: responding to the WAM or the alternate WAM, Office of Management and Budget (OMB), Office of Policy (OP), and the workgroup. It may include expanded analytical methodology; alternative baseline adjustments; ongoing new and refined data collection and quality control; analytical model expansion; alternative options/sensitivity analyses; information collection request (ICR) development, and continued Economic Assessment (EA) document preparation and revisions. The primary focus of this WA is to update the proposed EA and ICR by incorporating comments and suggestions to finalize the EA and ICR.

Finally, this WA includes the continued potential need for preparation of emergency turnaround assessments, general supporting materials, briefings, general project coordination, and ongoing communication/outreach to the WAM and alternate WAM.

WORK STATEMENT:

Task 1. Work Plan, Progress Reports and Budget

Within twenty (20) days of receipt of this WA, the contractor shall deliver a work plan. This plan shall include a proposed level of effort, budget, schedule of tasks, and schedule of deliverables. A cost proposal shall accompany this work plan.

All data collection, assessment, and quality issues associated with this WA shall adhere to EPA data quality guidance and requirements, as established in EPA Order 5360.1A2, EPA Manual 5360.A1, and OSWER's and ORCR's Quality Management Plans. See: http://www.epa.gov/quality/qa_docs.html

As part of the monthly progress reports for this WA, the contractor shall provide a summary of all data collection and quality control activities conducted during each month.

No confidential business information (CBI) shall be collected or used in conjunction with this WA. However, proprietary data may be used following written approval from the WAM.

This WA includes no limited travel for the contractor. However, travel remains approved under the prior Amendment.

Deliverable(s) and Schedule:

Work Plan and Budget within allotted time frame identified above.

Task 2: Programmatic Support

The contractor shall continue to be prepared to provide programmatic support in the area of short-term or quick turnaround technical assistance, analysis, and supporting documents to ORCR for the rule.

Under this task, the contractor shall develop and submit various general support documents and analyses directly or indirectly related to the rule. Examples of such documents/analyses may include, but not be limited to:

- cost or cost savings summary tables addressing impacts of one or more of the regulatory improvement areas;
- brief benefits assessments for one or more of the regulatory improvement areas;
- general or specific briefing packages;
- fact sheets, flow charts, or graphics;

The need for and number of such documents remains uncertain at the time of this WA. The WAM will provide a Technical Directive (TD) designed to clarify the need and scope of such document(s), as necessary. ***The contractor shall budget for approximately two (2) TDs under this Task.***

Work under this task shall build upon, but not duplicate work conducted under Work Assignment B-08, WA 1-08, and amendments.

Deliverable(s) and Schedule:

DELIVERABLES	DUE DATES
Development of quick-turnaround support documents and analyses related to the rule: To be defined in the TD (e.g., briefing package, fact sheet)	<u>Draft</u> : Five Agency working days from receipt of TD and all supporting information. <u>Final</u> : Five Agency working days from receipt of all written WAM comments on draft.

Task 3: Regulatory Support

The contractor shall continue to refine technical assessment(s), cost and economic assessment(s), human health and ecological benefit assessment(s), and related analytical analyses and support to ORCR, as needed, for the final regulation.

As with the original WA and past Amendments, additional regulatory support may continue to be necessary. This additional support may be the result of Team determinations, ORCR management directives, or OMB comments. Any additional support falling within the scope of this Task will be identified, as necessary, via a TD issued by the WAM. **The contractor shall budget for no more than two (2) TDs under**

this Task.

Deliverable(s) and Schedule:

Aside from the TD(s), the deliverables under this Task shall be incorporated into the EA document.

Draft and final deliverables shall be submitted in response to each TD. These deliverables shall be in memo format, and include a description of the analytical methodology (if appropriate), description of the data (universe, unit cost, etc.) and sources, presentation of findings, and identification of the key analytical limitations. Tables, charts, and graphics shall be incorporated, as appropriate for both sets of deliverables, to enhance and clarify the presentation.

The contractor shall continue to provide technical, cost, economic, human health and ecological benefits, and related analytical analyses and support to the ORCR proposed regulation: "Improvements to the Hazardous Waste Generator Regulatory Program". Document comments, concerns, issues or further analyses related to the EA will be provided by various offices, including OMB, the workgroup, and WAM.

Responses to comments may involve additional analyses on the methodology and the models employed in the EA. Some comments may only be editorial in nature. OMB often requires additional sensitivity analysis of the number of entities, costs and/or benefits. In addition to making editorial and numerical changes to the EA, the contractor shall assist with the preparation of briefings for OMB. The WAM may task the contractor to provide tables, bullet points and/or to draft a short memo in response to OMB comments detailing how their comments will be handled in regard to the final EA. The contractor shall e-mail the WAM and alternate WAM the draft final EA and any spreadsheets used to support the EA.

Once OMB clears the proposed rule, the contractor shall make any necessary changes to the proposed EA and submit the final EA to the WAM.

DELIVERABLES	DUE DATES
Technical Support Materials	Must be incorporated into the draft and final EA document.
Per Each Technical Directive	<u>Draft</u> : Ten (10) Agency working days following contractor receipt of each TD plus all necessary supporting information. <u>Final</u> : Five (5) Agency working days following contractor receipt of all written COR comments on the draft.

Task 4: General RCRA Support

Regulatory and non-regulatory support requirements under RCRA are wide ranging and diverse. Multiple projects are ongoing simultaneously, often requiring various levels of support on a short turnaround basis.

Under this Task, as with the prior WA and Amendments, the contractor shall be prepared to develop cost, economic, benefit and other impact assessments targeted toward a wide range of diverse projects and level of effort associated with RCRA facilities and requirements. These activities may include, but are not necessarily limited to:

- Additional analyses of the methodology and the models employed in the EA;
- Sensitivity analysis of the number of entities, costs, and/or benefits;
- Preparing briefing packages;
- Providing tables, bullet lists, fact sheets, flow charts, or presentation graphics;
- Drafting a short memo in response to OMB comments regarding how their comments will be handled in regard to the final EA; and
- Incorporating editorial comments into the final EA.

Actual requirements under this task are not yet determined and will be clarified in a Technical Directive (TD). The contractor shall budget for no more than two (2) TDs under this Task.

Deliverable(s) and Schedule:

For each Technical Directive under this Task, draft and final deliverables shall be presented. Each deliverable shall include charts, tables, and graphics, as necessary to ensure clarity of presentation in memo format.

The draft deliverable for each TD shall be due to the WAM no later than ten (10) Agency working days following contractor receipt of the TD, plus all necessary supporting documentation. The final deliverable shall be due no later than five (5) Agency working days following contractor delivery of all written WAM comments on the draft.

Summary of Deliverables and Schedule		
<i>Task and Deliverable(s)</i>	<i>Draft</i>	<i>Final</i>
Task 1: <u>Work Plan, Progress Reports and Budget</u>		
Initial Work Plan and Budget	As required by Contract.	As required by Contract.
Task 2: <u>Programmatic Support</u>		
Development of quick-turnaround support documents and analyses related to the rule: To be defined in the TD (e.g., briefing package, fact sheet)	Five (5) Agency working days from receipt of TD and all supporting information.	Five (5) Agency working days from receipt of all written WAM comments on draft.
Task 3: <u>Regulatory Support</u>		
Technical Support Materials	Must be incorporated into the draft and final EA document, according to the Task 5 schedule	
Per Each Technical Directive	Ten (10) Agency working days following contractor receipt of each TD plus all necessary supporting information.	Five (5) Agency working days following contractor receipt of all written COR comments on the draft.
Task 4: <u>General RCRA Support</u>		
Per Technical Directive	Ten (10) Agency working days following contractor receipt of the TD, plus all necessary supporting information	Five (5) Agency working days following contractor receipt of all written comments on draft

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-8				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period 04/30/2014 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			Econ Analysis & Related Suppor				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2014 To 04/29/2015					
Comments: The purpose of this amendment is to approve the contractor's work plan and cost estimate dated 05/12/2014 with Level of Efforts, (LOE) at 194 with cost plus fee at \$18,798.55 (b)(4) cost (b)(4) fee). The contractor is not authorized to go over the approved LOE and cost plus fee ceiling for this work assignment without prior approval from the contracting officer.										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) 22										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 194				
04/30/2014 To 04/29/2015										
This Action:						0				
Total:						194				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Phuc Phan						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-306-1013				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8316				
						FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-8				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-W-12-013			Contract Period 04/30/2014 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			Haz Waste Gen. Rule				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2014 To 04/29/2015					
Comments: The purpose of this amendment is to appoint Rachel Horton as the work assignment manager, (WAM) and Scott Palmer as the alternate work assignment manager (Alt. WAM). All terms and conditions remain the same.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 194				
04/30/2014 To 04/29/2015										
This Action:						0				
Total:						194				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Rachel Horton						Branch/Mail Code:				
						Phone Number 703-305-0894				
_____ (Signature) (Date)						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
						Phone Number: 703-605-0509				
_____ (Signature) (Date)						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
						Phone Number:				
_____ (Signature) (Date)						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
						Phone Number: 202-564-8316				
_____ (Signature) (Date)						FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-9				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015 Base Option Period Number 2			Title of Work Assignment/SF Site Name Peer Review of IWEM v3.0				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW 4 sections					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2014 To 04/29/2015				
Comments: This action is to initiate WA 2-9 titled "Peer Review of IWEM v3.0" with an LOE of 219 hrs. Taetaye Shimeles is appointed as the WAM and Tim Taylor is appointed as the alternate WAM. The statement of work is attached. The contractor shall submit a work plan/cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2015										
This Action:						219				
Total:						219				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Taetaye Shimeles							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> (Signature) (Date) </div>							Phone Number 703-308-8729			
							FAX Number:			
Project Officer Name Shannon Sturgeon							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> (Signature) (Date) </div>							Phone Number: 703-605-0509			
							FAX Number: 703-308-7903			
Other Agency Official Name							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> (Signature) (Date) </div>							Phone Number:			
							FAX Number:			
Contracting Official Name Christie Deskiewicz							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> (Signature) (Date) </div>							Phone Number: 202-564-3316			
							FAX Number:			

EPA CONTRACT NUMBER EP-W-12 -013

Statement of Work

Work Assignment Number: B-9

Work Assignment Amendment Number: 1

Title: External Peer Review of the Industrial Waste Management Evaluation Model (IWEM)
Beta Version 3.0

Work Assignment Manager (WAM): Taetaye Shimeles

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Telephone: (703)-308-8729
(703) 308-7903 (FAX)

Alternate WAM: **Zubair Saleem, Ph.D.**
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Washington, D.C. 20460

Telephone: (703)308-0467

BACKGROUND:

The Industrial Waste Management Evaluation Model (IWEM), as developed by the EPA provides a tiered analysis that helps to determine the most appropriate waste management unit (WMU) design to minimize or avoid adverse ground water impacts by evaluating one or more types of liners, the hydrologic conditions of the site, and the toxicity and expected leachate concentrations of the anticipated waste constituents. The pervious two versions (Version 1.0 and 2.0) had undergone external peer reviews in 2002 and 2008, respectively. For the IWEM Beta Version 3.0, an additional source module was added to evaluate the potential for contaminants release from drains and embankments along roadways.

PURPOSE AND SCOPE OF THIS WORK ASSIGNMENT:

The purpose of this work assignment amendment is to de-scope the remainder of work in the original work assignment and any unused level-of-efforts.

Task 1: Work Plan, Progress Reports and Budget

This task of preparing work plan is completed based on the requirements specified under the original work assignment. No more additional work will be completed under this task at this time and the level of effort ceiling is reduced by 3 hours.

Task 2: Identifying and Selecting Peer Reviewers

IWEM 3.0 Beta is still under development. The task of identifying and selecting peer reviewers will not be completed at this time. The level of effort ceiling will be reduced by 40 hours.

Task 3: Development of Peer Review Material

IWEM 3.0 Beta is still under development. The task of developing of peer review material will not be completed at this time. The level of effort ceiling will be reduced by 15.5 hours.

Task 4: Conduct Peer Review, Compile Comments and Prepare a Peer Review Report

IWEM 3.0 Beta is still under development. The task of conducting peer review, compiling peer review comment and preparing a peer review report will not be completed at this time. The level of effort will be ceiling reduced by 216 hours.

IWEM Beta Version 3.0 Peer Review Schedule	
Items	Due Date to EPA
Task 1: Work Plan	Completed
Task 2: No more work will be completed at this time.	Not Applicable
Task 3: No more work will be completed at this time.	Not Applicable
Task 4: No more work will be completed at this time.	Not Applicable

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-9				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2015 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name IWEM v3.0 Peer Review				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW 4 sectuib					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2014 To 04/29/2015				
Comments: The purpose of this amendment is to approve the contractor's work plan/cost Estimate dated 05/02/2014 with, Level of Effort (LOE) at 189 hours which equals to \$29,352.7 (b)(4) cost (b)(4) fee). The contractor is not authorize to go over the approved LOE and cost plus fee ceiling for this working assignment without prior approval from the contracting officer.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 219						
04/30/2012 To 04/29/2015										
This Action:				-30						
Total:				189						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Taetaye Shimeles							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>							Phone Number 703-308-8729			
							FAX Number:			
Project Officer Name Shannon Sturgeon							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>							Phone Number: 703-605-0509			
							FAX Number: 703-308-7903			
Other Agency Official Name							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>							Phone Number:			
							FAX Number:			
Contracting Official Name Eulvid Rocque							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>							Phone Number: 202-564-8316			
							FAX Number:			

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-9				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-W-12-013			Contract Period 04/30/2014 To 04/29/2015			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			IWEM Peer review				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2014 To 04/29/2015					
Comments: The purpose of this amendment is to put this work assignment (2-9) into stop work, as all tasks have been completed. The contractor is not authorized to incur any additional cost nor go over the approve ceiling of this work assignment without approval from the Contracting Officer.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO (Max 2) 22										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 189				
04/30/2014 To 04/29/2015										
This Action:						0				
Total:						189				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Taetaye Shimeles						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-308-8729				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Eulvid Rocque						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8316				
						FAX Number:				

EPAUnited States Environmental Protection Agency
Washington, DC 20460**Work Assignment**

Work Assignment Number

2-10

☐ Other☒ Amendment Number:*Base*

Contract Number

EP-W-12-013

Contract Period 04/30/2012 To 04/29/2015

Base

Option Period Number 2

Title of Work Assignment/SF Site Name

eEnterprise Benefits Analysis

Contractor

INDUSTRIAL ECONOMICS, INCORPORATED

Specify Section and paragraph of Contract SOW

Purpose:



Work Assignment



Work Assignment Close-Out



Work Assignment Amendment



Incremental Funding



Work Plan Approval

Period of Performance

From 04/30/2014 To 04/29/2015

Comments:

This action initiates WA 2-10, titled "eEnterprise Benefits Analysis in OSWER" with Level of Effort, (LOE) of 760 hours. David Nicholas is appointed as the Work Assignment Manager, (WAM) under this work assignment. The Statement of Work, (SOW) is attached. The contractor shall submit a work plan/cost estimate.



Superfund

Accounting and Appropriations Data



Non-Superfund

SFO
(Max 2)

22

Note: To report additional accounting and appropriations data use EPA Form 1900-89A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:

04/30/2012 To 04/29/2015

Cost/Fee:

LOE: 0

This Action:

760

Total:

760

Work Plan / Cost Estimate Approvals

Contractor WP Dated

Cost/Fee:

LOE:

Cumulative Approved:

Cost/Fee:

LOE:

Work Assignment Manager Name David Nicholas

Branch/Mail Code:

Phone Number 202-566-1927

FAX Number:

(Signature)

(Date)

Project Officer Name Shannon Sturgeon

Branch/Mail Code:

Phone Number: 703-605-0509

FAX Number: 703-308-7903

(Signature)

(Date)

Other Agency Official Name

Branch/Mail Code:

Phone Number:

FAX Number:

(Signature)

(Date)

Contracting Officer Name Eulvid Rocque

Branch/Mail Code:

Phone Number: 202-564-8316

FAX Number:

(Signature)

(Date)

Contract #: EPW 12 013
Statement of Work WA 2-10

Title: eEnterprise Benefits Analysis in OSWER

Contracting Officer's Representative:	Name:	David Nicholas
		202-566-1927
Address: OSWER/PARMS (5103t)	Fax No:	202 566-1933
1200 Pennsylvania, NW, Washington, DC 20460		

BACKGROUND, PURPOSE AND SCOPE

The Government Performance and Results Act (GPRA) of 1993 and GPRA Modernization Act of 2010 hold all federal agencies accountable for how they use their resources to achieve results. It requires: (1) strategic planning, (2) the development of measures to assess program performance and progress, (3) that information is reported to the public, and (4) that agencies develop a schedule of planned and completed program evaluations.

Assessing the benefits of modernizing our national system of environmental protection, in coordination with our state, local, and tribal partners is an essential component to understanding our progress towards agencywide GPRA goals and objectives. The initiative to modernize the way environmental results are monitored, reported and assessed is known as eEnterprise. Part of this analysis includes the application of Lean program techniques to make the optimal choices on business process streamlining.

eEnterprise is an initiative between States and EPA to improve environmental outcomes through maximizing the use of advanced monitoring and technology; optimizing program operations; increasing transparency; and to dramatically enhance service to the regulated community and the public. This initiative will expand the use of advance monitoring technology in research, regulations, and inspections so that government, regulated entities and the public will have better information on sources of pollutants and environmental conditions. This statement of work covers the support needed to assess the benefits of taking this new approach and describe the positive impacts and costs in both quantitative and qualitative terms.

To ensure state perspectives are included, EPA and the Environmental Council of States (ECOS) formed a Working Group in June 2012 to collaboratively pursue electronic reporting between regulated entities and environmental government regulators. However, electronic reporting is only one part of a much larger set of opportunities and challenges that need to be addressed as we seek to modernize our approach to environmental protection using advances in both emissions/pollutant monitoring and information technology. Further, on December 5, 2012 the President of ECOS and the US EPA Deputy Administrator signed a joint statement confirming the commitment of the States and EPA to collaboratively govern eEnterprise.

In this larger initiative, called eEnterprise, regulated entities could electronically conduct business transactions with the government: submitting permit applications, updating financial assurance documentation, and reporting emission and pollutant discharge data. The tools/systems that support this should be “smart” to help entities understand their regulatory obligations, eliminate duplicative entry of information and efficiently support electronic signature requirements consistent with proposed EPA and state regulations. Quantifying and describing these beneficial impacts is a necessary step in managing the eEnterprise initiative and will form the core of this statement of work’s tasks. EPA is also assessing what changes are necessary to align its data systems on environmental reporting to prepare for and make optimal use of sensors and other ways to leverage technology for more sophisticated data analysis and advanced monitoring.

This initiative is also based on using advances in emissions/pollutant monitoring technology to expand the ability of the government, regulated sources and the public to detect and measure pollutant discharges/emissions and environmental conditions. Pollutants that were largely “invisible” will not only become visible, but information on them will be electronically exchanged and used to more effectively prevent, reduce and manage pollution. Characterizing the benefits to communities and stakeholder groups that stand to gain from these advances will also be an important task.

The COR is authorized to provide written technical direction to the Contractor (with a courtesy copy to the Contracting Officer and Project COR) to clarify requirements already specified in this Statement of Work.

Work on this Call Order shall begin on date of award and end April 29, 2015. Work under this Call Order applies to task IV of the BPA SOW.

TASK 1: Assessing OSWER Data Systems to Prepare for Advances in Monitoring and Data Analysis

- 1-1 Consistent with the direction of the Leveraging Technologies Steering Committee and related outyear budget initiatives, the contractor shall conduct an assessment of OSWER’s data systems to determine what changes would be necessary to take advantage of advances in monitoring. The contractor shall utilize existing EPA reports and work products in initial research. The contractor shall draft a report that identifies technical, policy, regulatory, and programmatic changes that would be necessary to ensure OSWER data systems align with changes contemplated in agency initiatives such as OECA’s Big Data project.

Deliverables and Schedule Under Task 1

- 1-1 Report on OSWER Data Systems
- a. Outline of report 7 days after the COR sends technical direction
 - b. Draft report 7 days after COR sends review comments
 - c. Final report 7 days after COR sends review comments

TASK 2: Supporting eEnterprise Initiatives

- 2-1 The contractor shall provide analytical support via brief assessments (2-3 pages) to potential OSWER projects under the FY15 eEnterprise initiative across all waste management and cleanup programs. The contractor shall analyze existing and new project proposals to identify the scope of any necessary regulatory changes, new information collection burdens and costs to regulated community. The contractor shall also examine opportunities to implement user fees in any potential eEnterprise project.

Deliverables and Schedule Under Task 2

2-1 Project Assessments

- a. Draft assessments 5 days after the COR sends technical direction
- b. Final report 5 days after COR sends review comments

Work Assignment Form, (WebForms v1.0)